Two Sections—Section Two

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Railway Age

Motor Transport Section

Devoted to the Co-ordination of Railway and Highway Service

DECEMBER 27, 1930

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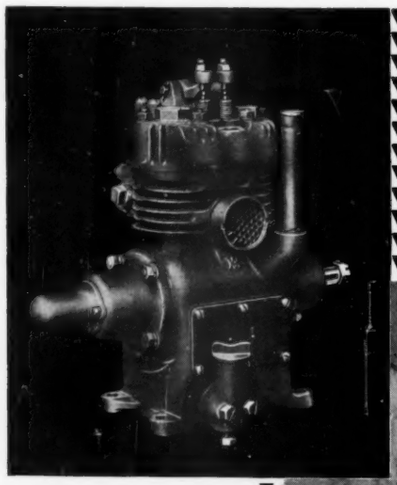

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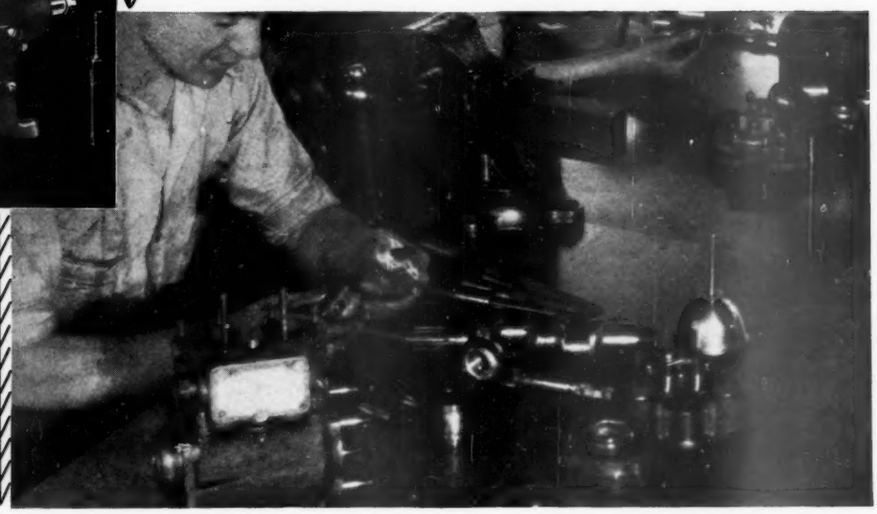

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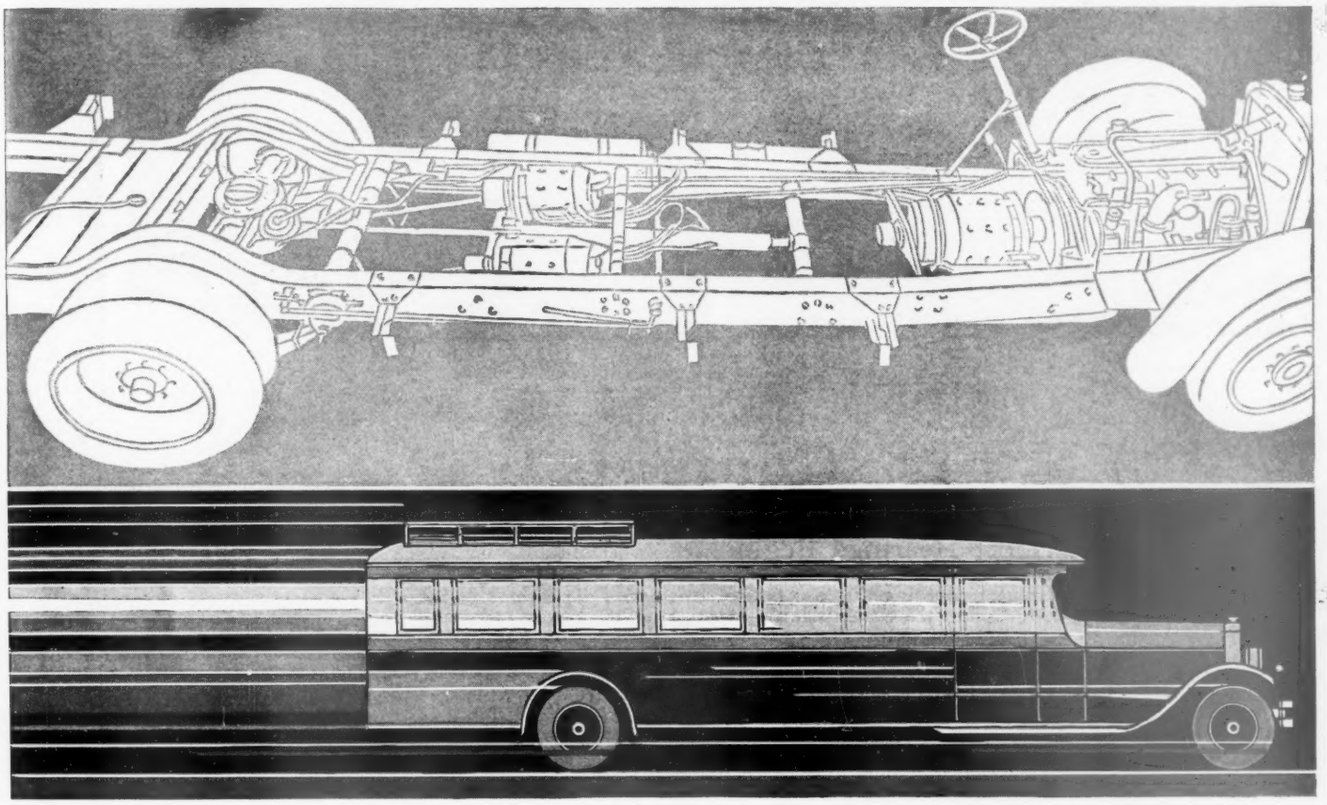

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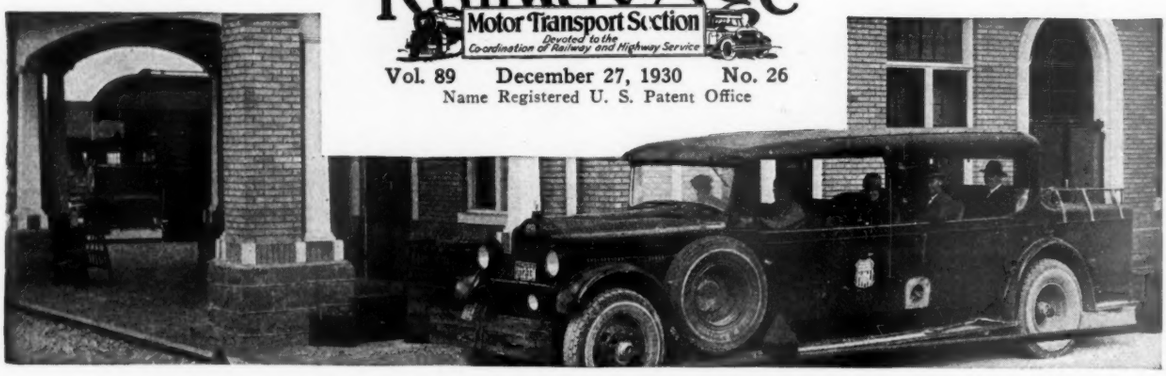

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Railway Age
Motor Transport Section
Devoted to the Co-ordination of Railway and Highway Service

Vol. 89 *December 27, 1930* *No. 26*

The Motor Transport Investigation

THE Interstate Commerce Commission's investigation into the existing co-ordination of railway and motor transporation is now well under way, with half of the scheduled hearings completed. Up to this time, testimony has been taken at eight cities in the middle west, the south, and the east, including St. Louis, Mo., Dallas, Tex., Atlanta, Ga., Boston Mass., and New York. On January 5, the hearings will be resumed at Chicago, to continue through January and February in a number of western cities. In view of the fact that the Commission has now reached the mid-point in the hearings it may not be untimely to take stock of what has been accomplished at the hearings which have already been held.

At these hearings the testimony of railroad witnesses has been predominantly favorable toward motor vehicle operation by railways. The impression, from the testimony, that the railways are thoroughly convinced of the utility of motor coach and truck operation co-ordinated with train service, is inescapable. This may be due to some extent to the fact that the railways which have taken a most active part in the hearings are nearly all operators of motor vehicles at the present time.

Regulation Needed

Railroad witnesses have uniformly testified also that regulation of motor coaches and motor trucks is highly desirable in the interest of stabilized transportation conditions. Ample proof has been put into the records that in many parts of the country the lack of enforcement of regulatory laws now in effect has resulted in a state of affairs which can only be described as chaotic. Non-railroad counsel and witnesses have endeavored to prove that motor transportation is even now functioning on a sound economic basis, but this hardly seems to be the case when a stable, non-discriminatory rate structure applying to motor truck transportation is so conspicuously absent.

The question of taxation of motor vehicles has arisen in a number of instances, railroad witnesses contending that motor coaches and motor trucks are not paying their rightful share of the cost of construction and maintenance of the highways which they use as a place of business. Counsel for independent motor coach and truck lines and motor vehicle manufacturers, in such cases, have been quick to cross-examine these railway witnesses and to call witnesses of their own in support of their contention that motor coaches and trucks are already heavily and adequately taxed. If the railways desire to back up to the limit their contention that motor coach and truck taxes are inadequate, the current motor transport investigation hearings offer a splendid opportunity for them to do so, the opportunity being particularly attractive because of the newspaper publicity which comes out of these hearings. It is to be hoped that a large number of railways will enter at the forthcoming hearings all of the actual evidence which they have that motor coach and truck taxes should be substantially increased. The mere statement of such an opinion is not enough; the opinion should be supported by comprehensive facts and figures.

Savings from Motor Vehicle Operation

Some remarkable examples of savings in train operating costs made possible by motor truck and coach operation have been cited by a number of railway witnesses. From the evidence so far presented, it appears that motor coaches operated in place of train service are ordinarily unprofitable in themselves, but are highly profitable on account of the wide margin between the relatively small amount of money which they lose and the much more substantial amount of money which they save by making possible the taking off of trains. Motor trucks which have replaced train and trap car service have likewise enabled the railways using them to reduce their train operating expenses in substantial amounts.

It is unfortunate that more railways have not taken advantage of the opportunity to present a strong case in their own interest at these hearings. That they have failed to do so, the commission itself is well aware. At the Detroit hearing, Examiner Leo J. Flynn took the railways severely to task on this point.

"The railroads have been making representations to the commission as to their position," said Examiner Flynn, "but now when they have an opportunity to come and present their evidence and their case in this proceeding, they do not do it in the manner and to the extent which they should. It would be much better if they would present their case before a proper tribunal in a proper form than to make whining speeches before luncheon clubs. There should be more testimony and constructive thought advanced by experienced traffic officials of the respondents and others at these hearings, which will help toward the solution of the serious transportation problems which it is the purpose of this proceeding to help solve."

An Opportunity

Some of the railways have presented important evidence at the hearings already held; others have not done so. It would be most unfortunate if the railways should let slip this opportunity to emphasize their views on the regulation and taxation of motor vehicles, and on motor coach and truck operation, where they will do the most good.

Perhaps the failure of some railways to take more interest in these hearings has been based upon their doubt as to the exact nature of the information which the commission wants. Light was thrown on this point by Commissioner Brainerd at the opening of the first hearing at St. Louis, Mo. Some roads are making use of motor vehicles in connection with their rail operation, said the commissioner, and such use is extensive. The railways have informed the commission, he continued, of certain difficulties encountered in co-ordinating railway and motor transport, and the present inquiry has as its purpose the disclosure of the legal steps necessary to facilitate the effective co-ordination of the two forms of transportation. The facts needed, concluded the commissioner, are as to the economic problems involved; the obstacles, legislative and otherwise, which stand in the way of co-ordination; the results which have been obtained by carriers which have effected co-ordination in one way or another; and any other information based on experience in rail-highway co-ordination.

The Information Wanted

The reports of the hearings already held, which have appeared from week to week in the *Railway Age* since November 22, indicate the nature of the testimony which has been given. It is believed that this testimony has been satisfactory for the commission's purpose and likewise constructive from the standpoint of the railways. Such criticism as has been voiced has not been concerned with the nature of the testimony which has been presented, but with the lack of more of it. The response of the commission's representatives to the testimony given, and the questions which they have put to the witnesses on the stand, are construed to indicate that the commission hopes in its investigation to do effective work in assisting the railways to meet the serious problem which they are facing as a result of the widespread development of motor vehicle competition. It is to be hoped that the railways will not fail to take full advantage of the opportunity offered to them by this investigation. The hearings are less than half over, and there is still plenty of time, particularly for the western railways, but also for the eastern roads—at the hearing at Washington on March 4—to present their viewpoint on this many-sided but most vital problem.

Communication

A Reply to J. S. H.

PORTLAND, ORE.

TO THE EDITOR:

After reading the letter in your October 25 issue signed by J. S. H., of Kansas City, I cannot refrain from making brief comment.

I have no data at hand to refute the items of expense incurred as shown in trucking 35,000 lb. of freight outbound and 22,400 lb. inbound, a total of 474 miles in 32 hours. The profit of $395.87 for this service may be a real honest-to-goodness profit on the books of the trucking concern; but is it an entirely legitimate profit, judged by American standards of competition?

Why wonder about the failure of the railroads to go after this business when they are kept so busy endeavoring to protect their investment on the basis of rates prescribed by the commissions representing the public, and at the same time providing their share, an ever increasing share, of city and county taxes which are assessed for the purpose of government, no small part of which is used to provide the highway over which the truck operates? Not a penny of the $395.87 profit above referred to goes to maintain the railway right-of-way.

In the schedule of expenses in the article referred to, note the item of $12.00 for the truck driver's salary for 32 hours. This figures 37½ cents per hour. Imagine a railroad company paying this wage to their enginemen or to any other class of employee with similar responsibility!

It may "look like a Rip Van Winkle for the railroads," but they will fight clean. A transportation business, privately financed, may easily be ruined in any country on the globe by subsidized competition, whether that competition be piece-meal by motor trucks operating on the highways provided by the tax-payers, or mass hauling by river barges encouraged by the government. In the meantime the railroad companies, after having developed the country, will probably continue to pay their share of the taxes necessary to maintain the highway which is constantly being pounded to pieces by tractors, semi-trailers and four-wheel trailers engaged in transporting stolen freight at fancy profits.

L. D. FERGUSON,
Purchasing Department, Spokane, Portland & Seattle.

Motor Transport Hearings Begin

Interstate Commerce Commission concludes first half of series of sessions investigating railway and motor transport co-ordination

HEARINGS in connection with the Interstate Commerce Commission's investigation under Docket 23,400, Co-ordination of Motor Transportation, have been held thus far in eight eastern and southern cities. An extensive picture of the extent to which railways are coordinating motor coach and truck service with their rail operations, and of the motor vehicle competition with which railways are contending, has already been obtained by the commission. The testimony taken has supplemented the data gathered by the commission through the questionnaire which it issued last summer. A statistical summary of the replies to this questionnaire is presented in another article in this issue.

Commissioner Ezra Brainerd, Jr., has been present at several of the hearings already held. He is assisted by Examiner Leo J. Flynn, whose report on the commission's motor transport investigation in 1926 is still frequently referred to, and by Examiner Albert E. Stephan.

The hearings have been temporarily suspended for the holidays, to be resumed in Chicago on January 5.

The St. Louis Hearing

That the Interstate Commerce Commission sees a need for effective co-ordination of railway and highway transportation, and that it is desirous of finding out what legal steps are necessary to open the way to such co-ordination, was indicated by Commissioner Brainerd in a statement made at the beginning of the first hearing, in St. Louis. The railways, said the commissioner, are the backbone of the transportation system of the country, but other forms of transportation, particularly motor transport, have also assumed positions of importance. The effect of the advent of motor transport has been a general and rapid decline in certain classes of railway passenger and freight traffic.

Some roads are making use of motor vehicles in connection with their rail operations, said the commissioner, and that such use is extensive is indicated by the tabulation which the commission has prepared from the railways' replies to the questionnaire distributed last summer to all carriers subject to the Interstate Commerce Act. The railways have informed the commission, he said, of certain difficulties encountered in co-ordinating railway and motor transport, and the present inquiry has as its purpose the disclosure of legal steps necessary to facilitate the effective co-ordination of the two forms of transportation.

The facts needed, the commissioner continued, are: Economic problems involved; the obstacles, legislative and otherwise, which stand in the way of co-ordination; the results which have been obtained by carriers which have effected co-ordination in one way or another; and any other information based on experience in rail-highway co-ordination.

At the outset of the hearing, Ivan Bowen, counsel for the Pickwick-Greyhound Lines, large motor coach operators in the Southwest, pointed out the present tendency on the part of certain railways toward reduced day coach fares, and asked that the St. Louis-San Francisco, the Texas & Pacific, and the Atchison, Topeka & Santa Fe be required to put into the record testimony relative to the reduced fares they have in effect, the points between which these fares apply, and the revenues and expenses involved in operation under these reduced rates. His purpose apparently was to bring about a showing that railways, in order to "run the busses off the highways," are incurring greater losses under the reduced rates than they encountered under standard rates. The commission took this request under advisement.

Cotton Belt Testimony

The first railway witness was F. H. Millard, controller and assistant to the president of the St. Louis Southwestern and the Southwestern Transportation Company. He told of the organization of the Southwestern Transportation Company as a subsidiary of the Cotton Belt, and described its existing operations in detail. As to results, he said that the transportation company's passenger revenues in 1929 more than equalled the decline in passenger revenue suffered by the railway in 1929 as compared with 1928, and that it had enabled the reduction of train service with an annual saving in operating expenses of $560,000.

Railway ownership of the trucks which it uses makes possible the maximum service, said Mr. Millard, who went on to describe the various ways in which the transportation company is using such vehicles. The railway and its subsidiary have a reciprocal contract, each agreeing to handle freight for the other, at a charge of 50 cents per car mile by the railway and 25 cents per vehicle mile by the transportation company.

The transportation company has confined itself to intrastate operation under this contract, said Mr. Millard. In reply to questions asked by the commissioner, he said he believed that interstate operation would be legal, since the transportation company is considered an express company under the contract. He stated that informal conversations with members of the commission had raised some doubts about the legality, however, and that consequently the operation of the contract has been confined to intrastate traffic. The transportation company filed a local express tariff with the commission early this year, said Mr. Millard, but this was rejected.

Mr. Millard said that it was the purpose of the Cotton Belt to restrict the operations of the transportation company to Cotton Belt territory, but that in a few instances it had been forced by special circumstances to go off of or beyond its rail lines, to points served by other railways. He was questioned at length on this point and on an interline contract of the transportation company with an independent truck operator for the transportation of freight beyond Cotton Belt territory. Such interline arrangements are made

in all instances by the transportation company, said Mr. Millard, the railway company coming into the transaction only to the extent that it handles the freight under a bill of lading of the transportation company.

Mr. Millard was followed on the stand by D. W. Russell, vice-president and general manager of the transportation company, who testified that in no instance does the transportation company serve by truck any point not on the rails of the Cotton Belt.

Missouri Pacific Testimony

The Missouri Pacific next introduced its testimony. Its witness was P. J. Neff, assistant to the president of the railway and vice-president and general manager of the Missouri Pacific Transportation Company. He described the present operations of the transportation company, saying that their purpose was to provide highway transportation in Missouri Pacific territory and to enable co-ordination of railway and highway service. The company operates motor coaches for passengers and handles freight as an express company, contracting with the railway for rail service and with local truckmen for pick-up and delivery service.

Three railways are interested in motor coach lines operating in Missouri Pacific territory, said Mr. Neff, setting up competitive conditions by motor transport which they could not otherwise legally bring about.

The transportation company's operations, while unprofitable in themselves, have enabled the railway to effect substantial savings in train operation costs, said Mr. Neff, making the highway operation profitable from the standpoint of the railway.

Contract Carriers Get Bulk of Traffic

The bulk of the truck traffic moves by private or contract carriers, he said, and regulation of only common carrier truck lines would not be sufficient to put truck and railway competition on a fair basis.

Questioned by the commissioner, Mr. Neff said that the transportation company has not taken passengers from the railway. The store-door service provided for freight shipments has been confined to intrastate business, since it is debatable whether such service can legally be provided on interstate shipments. The commissioner suggested that this might be construed as discrimination against interstate shippers. Mr. Neff agreed that the service should be extended to interstate traffic if this were found to be legal.

In conclusion, Mr. Neff stated that long-haul transportation by motor coach and truck is increasing, while short-haul transportation by motor coach is decreasing.

The next witness, H. E. Watts, passenger traffic manager of the Wabash, described two contracts which that railway has with motor coach lines, providing for the handling of rail passengers in motor coaches, to save train operation. Motor coach competition has been felt most between the larger terminals, said Mr. Watts, who submitted the results of tests which indicated that motor coach lines are handling more passengers than the railways between Chicago and St. Louis and between Chicago and Detroit. He favored regulation of interstate motor coach lines, to maintain the rates of the highway operators at reasonable levels.

Truck Rates Lower than Rail

F. G. Maxwell, assistant general freight agent, Wabash, took the stand to testify concerning truck competition in Wabash territory. Keen truck competition between important centers has substantially reduced merchandise traffic, he said. Between St. Louis and Kansas City, for example, this business handled by the Wabash in the first nine months of 1925, was 2,025 tons, and only 542 tons in the first nine months of this year. Mr. Maxwell submitted a map showing the relation of through highways to the Wabash Railway lines.

Questioned by the commissioner, Mr. Maxwell stated that truck competition has existed for 10 years, but has not been a serious factor in long haul transportation for more than five years. He estimated that 60 per cent or more of traffic loss has been due to truck competition. Truck rates are generally lower than railway rates, he said, and truck lines, provide store-door collection and delivery service which is not given by the Wabash. An increasing amount of carload traffic is also leaving the railways, he said, the reason being that the cost is less, due to store-door collection and delivery, as well as lower rates. Minimum packing requirements of truck lines also prove an attraction to traffic. The commissioner asked if the railways had considered the possibility of easing their packing requirements to meet truck competition, to which Mr. Maxwell replied that some attention has been given to this question.

Cotton Belt Trucking Agreement

F. H. Millard, comptroller of the St. Louis-Southwestern, took the stand again to testify concerning the interline agreement between the Southwestern Transportation Company and the independent truck line. He said the agreement provides for acceptance by the transportation company of freight at its Memphis depot for transportation to Hot Springs, Ark. This traffic moves over Cotton Belt rails between Memphis and Little Rock, with the transportation company acting as consignor and the Cotton Belt receiving the full rail rate. At Hot Springs freight is received by the independent truck line and delivered to Hot Springs. Revenues from such traffic are shared by the Southwestern Transportation Company and the independent truck line.

The Kansas City Hearing

The hearing was continued at Kansas City, Mo., on Nov. 21. E. D. Wilson, industrial agent, Kansas City Southern, said that 34 motor coach lines operated 1,081 miles of route and 48 truck lines operated 2,508 miles of route, competitive to his rail lines. This severe competition has been intensified by many contract carrier trucks, he said. The competition began to appear about 1921. An example of l.c.l. freight loss was the decrease at Kansas City of originating l.c.l. freight from 47,187 tons in 1920 to 33,497 in 1928. He asked for federal regulation of trucks and motor coaches and desired that truck rates throughout the country be standardized and based on operating costs.

Examiner Stephan asked whether reductions in rail passenger rates had been helpful. Mr. Wilson said they had not. Asked if rail passenger rates had not been raised substantially and if that was not the leading factor in loss of passengers, Mr. Wilson admitted that passenger losses had come after passenger rates had gone from 2 to 3.6 cents per mile.

Pickwick Greyhound Operations

W. L. Wimberly, assistant to the general manager of the Pickwick Greyhound Lines, described the operations of this independent motor coach company which, with subsidiaries, operates over a total of 10,502 route miles between Chicago, Omaha, Neb., St. Louis, Mo., Kansas City, Denver, Colo. Salt Lake City, Utah, Los Angeles, Cal., Portland, Oro., Tulsa, Okla., and El Paso, Tex. Short-haul rates, Mr. Wimberly said range from 2⅓ to 3¼ cents per mile, while the rates for transportation

over distances in excess of 500 miles range from 2 cents to 2½ cents per mile. Where rates of less than 2 cents per mile are in effect, they have been forced by competition, he said. Between January 1, 1930, and September 30, the Pickwick Greyhound Lines carried 1,885,501 passengers.

J. W. Blood, attorney for the Southern Kansas Stage Lines, testified that motor coach lines are under keen competition from private automobiles and that they no longer fear railway competition. He further testified that the railways will never be able to compete with motor truck service unless they improve their service greatly. Truck rates by licensed carriers in Kansas are generally five cents per hundred pounds higher than railway freight rates, said Mr. Blood, but shippers are willing to pay the extra charge because of the faster service offered, and also because of the store-door collection and delivery service. The Southern Kansas Stages Lines are now operating 870 truck miles daily between 55 freight stations, and are handling 250,000 lb. of freight daily.

C. F. Real, traffic manager of the Topeka Chamber of Commerce filed an exhibit containing the statements of 22 Topeka shippers, the majority of whom agreed that they are being served better by truck transportation than by the railways.

J. H. Tedrow, transportation commissioner for the Kansas City Chamber of Commerce, estimated that the equivalent of 4,000 to 5,000 carloads of merchandise is being shipped in and out of Kansas City monthly by motor trucks. The Kansas City stockyards received 1,063,117 animals last year by motor truck.

The Dallas Hearing

The commission heard the testimony of representatives of railways operating in Texas at a hearing in Dallas, on November 28 and 29. G. B. Herbert, assistant auditor of the Southern Pacific Lines in Texas and Louisiana and a director of Southland-Greyhound, Inc., testified that the Southern Pacific owns 35.21 per cent of the stock of Southland-Greyhound, Inc., which is a Delaware corporation, a holding company which owns the Southland-Greyhound Lines of Texas. The railway acquired stock in Southland-Greyhound, Inc., to the amount of $520,000 and in addition holds notes of the motor coach operating company to the amount of $120,000 for money advanced to liquidate indebtedness and for the installation of new lines. Mr. Herbert explained that the stock was acquired as a part of the program of the Southern Pacific to bring about greater co-ordination of railway and highway service and to make possible extensive use of motor coaches to supplement rail service. He said that the Southern Pacific considers the stock acquisition a sound venture and that the railway expects later to earn a profit on its investment as further economies are effected. Since the Southern Pacific acquired its stock interest, he said, the Southland-Greyhound has disposed of unprofitable lines and leased other lines to individuals.

Mr. Herbert testified that congestion on the highways should cause an increase in short-haul motor coach traffic. He predicted that a continued increase in highway congestion would result in less extensive use of private automobiles and more patronage of motor coaches.

In reply to a question from Commissioner Brainerd, Mr. Herbert said that the Southland-Greyhound motor coach lines in some instances parallel railway lines other than those of the Southern Pacific, but he stated that his company has not taken advantage of this situation in order to attract traffic from competing railways. One instance of this sort which was mentioned was the motor coach line operated by Southland-Greyhound between San Antonio, Tex., and Laredo, which parallels the International-Great Northern.

Under examination by attorneys of other railways, Mr. Herbert said also that the Southland-Greyhound Lines parallel the Texas & Pacific for a distance of some 600 miles between El Paso, Tex., and Dallas. In reply to a question as to whether or not the Southern Pacific, through the Southland-Greyhound Lines, is attempting to cut into the business of the Texas & Pacific and the International-Great Northern, Mr. Herbert said that the Southern Pacific does not control the policies of Southland-Greyhound. Examiner Flynn asked why not, to which Mr. Herbert replied that, as a large stockholder, the wishes of the Southern Pacific would doubtless be observed when this would be helpful by the motor coach company, but that the railway is only represented on the board of directors and on the executive committee and does not hold full control. It was pointed out that a Missouri Pacific Transportation Company motor coach line, operating between Falfurrias, Tex., and Edinburgh, parallels the Southern Pacific. It was stated that one of the purposes of the Southern Pacific in acquiring the stock of the Southland-Greyhound Lines was to make it possible to discontinue unprofitable railway service in favor of highway service. Mr. Herbert said that the Southern Pacific has been interested in motor transportation only for a short time and that the situation is still under study.

S. P. Plans Expansion

The store-door collection and delivery service provided between certain points on the Southern Pacific Lines in Texas by the Southern Pacific Transport Company was described by T. W. Waldrop, vice-president and general manager of the motor transport company. (This is a service similar to that operated by the Pacific Motor Transport Company in conjunction with the Southern Pacific in California and Oregon, which has been described in previous issues of the *Motor Transport Section.)* Mr. Waldrop said that applications are now pending before the Texas Railroad Commission for extension of the service to additional cities. He also said that the Southern Pacific expects to find it desirable to extend this service to interstate traffic. The elimination of unregulated truck operation by motor carriers who juggle their rates to meet cut-throat competition between themselves was urged by Mr. Waldrop. He said that the motor carriers are taking even carload business from the railways, and that the existing Texas law regulating truck lines is susceptible of so many conflicting interpretations that it is impracticable to enforce it.

J. B. Payne, vice-president in charge of traffic of the Texas & Pacific said that the pick-up and delivery service provided through the Texas & Pacific Motor transport Company has justified itself. This service, he said, is now furnished on all Texas & Pacific lines where there is truck competition. Mr. Payne said that the truck rates are now approximately the same as railway rates, but that the railway would like to see the truck rates increased 20 per cent. The Texas & Pacific pick-up and delivery service has had no appreciable effect on the railway's earnings, Mr. Payne said, although the railway has obtained business through it which would otherwise have gone to competitive truck lines.

Mr. Payne told the commissioner that the legal department of the Texas & Pacific had concluded that the Texas & Pacific Motor Transport Company, which operates the pick-up and delivery service, could legally

engage in interstate commerce under existing laws. He said, however, that the Texas & Pacific still operates in intrastate service only.

Harvey Allen, general freight agent of the Missouri-Kansas-Texas, testified that his railway is willing to meet the competition of regulated motor trucks but that unregulated trucks are offering a form of competition which the railways cannot meet. He said that the pick-up and delivery service inaugurated by the Katy through the Missouri, Kansas & Texas Transportation Company has enabled the railway to recover some l. c. l. traffic, but that trucks are beginning to make inroads into the carload business, particularly cotton.

D. W. Milam, auditor of the Electric Express Company, which operates over the rails of the Texas Electric Railway, described the operation of package cars daily out of Dallas under joint through rates with the Missouri Pacific Transportation Company. Motor coach and truck service and conditions in Kansas were described by Miss Helen E. Smith, supervisor of the motor carrier department of the Kansas Public Service Commission.

The hearing at New Orleans on December 3 brought forth no railway testimony.

The Atlanta Hearing

At the Atlanta hearing the first witness for the Central of Georgia, S. L. Peek, statistician on the staff of the vice-president and general manager, described, in detail the history and extent of operations of the Central of Georgia Motor Transport Company of which he is secretary. Combination motor coaches, having compartments for handling a substantial quantity of mail, baggage and express, are operated by the motor transport company, he said, in replacement of several branch line trains, while trucks are being used in the Birmingham district to replace two freight trains and to improve the freight service. These trucks move only from station to station and do not render store-door service, he testified.

W. B. McKinstry, controller of the Central of Georgia, and auditor of the motor transport subsidiary, testified as to the results of the motor transport company's operations. The motor transport company, he said, has operated at a net loss of $28,449, of which $15,232 was incurred during the first ten months of this year.

Depreciation on the motor vehicle equipment, Mr. McKinstry said, is figured at 20 per cent per year, while a maintenance reserve of six cents a mile is set aside for motor coach maintenance and five cents a mile for motor truck maintenance. In addition, there is a tire reserve of 1½ cents per mile.

Highway Subsidiary Reduces Operating Expenses for the Central of Georgia

As a result of its subsidiary's operations, Mr. McKinstry testified, the Central of Georgia has been able to save $7,038 a year from the replacement of passenger train service between Fort Valley, Ga., and Perry; $10,004 a year from the replacement of passenger train service between Opelika, Ala., and Roanoke; $6,758 a year from the replacement of passenger train service between Eufaula, Ala., and Ozark; and $4,135 a year from the replacement of passenger train service between Cuthbert, Ga., and Fort Gaines. The trucks operating in the Birmingham district, he continued, are enabling the railway to save $20,000 a year in train operating expenses, as well as $11,940 a year in per diem on freight cars.

Examiner Flynn asked Mr. McKinstry for his conclusions as to the advisability of a railroad's substituting motor vehicle service for train service. Such substitutions, said the witness, can be effected advantageously on lines having light traffic. Public opinion, he concluded, is an important factor to consider in planning replacement of train service.

Motor coach competition and the motor coach operating methods of the Central of Georgia were described by John W. Blount, general passenger agent of the railway and its subsidiary. The motor coach fare on the railway-operated vehicles is the same as the rail fare, he said. Railway agents sell both kinds of tickets, and the same stations are used. Revenues from the sale of motor transport company tickets are reported to the railway by the agents, and are credited to the motor transport company's accounts.

The Central of Georgia's passenger revenues have declined 49 per cent since 1920, said Mr. Blount. Sixty-two motor coach lines are operating under certificates in Georgia, he said, and 36 of these compete with the Central of Georgia. Between Atlanta and Macon, for example, two motor coach companies offer 11 schedules in each direction daily, charging a fare of $2 while the rail fare is $3.17. He compared railway and motor coach fares between a number of other points, such as Atlanta and Jacksonville, Fla., the rail fare being $12.23 and the motor coach fare $7.50.

The railways are losing long-haul as well as short-haul traffic to the motor coach lines, said Mr. Blount. The motor coaches are not much slower than the railways' fastest trains between a number of important points in the southeast. As an example, he mentioned the service between Atlanta and Jacksonville, where the motor coaches make almost as fast time as the overnight trains between these cities.

Questioned by Examiner Flynn as to the attitude of the public toward the substitution of motor vehicle service for train service, Mr. Blount said that in every instance a proposal to remove train service in favor of motor coach service is resisted by the public, which wants its trains for sentimental if for no other reasons. The Central of Georgia has had no complaints concerning its motor coach services since they have been established, he added.

Highway Freight Traffic in Georgia and Alabama

W. McN. Knapp, freight traffic manager of the Central of Georgia, testified that a large volume of freight traffic is now moving by truck in Georgia and Alabama, for distances up to 400 miles. There are over a hundred fixed-route, certificated lines in Georgia and nearly two hundred certificated lines which do not operate over fixed routes, he said, but there are many more which have no certificates at all. Both contract and common carrier haulers are able to secure certificates without difficulty, said Mr. Knapp, and the contract haulers so certificated can operate as they please anywhere in the state. Trucks were taking a large amount of cotton from the railways until the latter reduced their rates and thus held this business, he said. Questioned by the examiner, Mr. Knapp said that the Central of Georgia has not offered store-door service as yet.

B. H. Lord, general manager of the Louisville & Wadley, the Wadley Southern, the Wrightsville & Tennille and their joint subsidiary, the Short Lines Motor Transport Company, testified that the Wadley Southern has abandoned 60 miles of line, partly because of the decline of the lumber industries served but also because of motor vehicle competition. The motor transport subsidiary, he said, operates a combination passenger and express motor coach between Wadley and Louisville and

between Wadley and Stillman, replacing train service the withdrawal of which saves the Louisville & Wadley $20 a day and the Wadley Southern $30 a day. The annual railway savings resulting from the motor coach operation were estimated at approximately $12,500.

Mr. Lord told of a conversation with a shipper concerning the possibility of the railways offering store-door service. This shipper, said Mr. Lord, was of the opinion that store-door service offered by the railway would bring about a return of merchandise traffic to it only if the store-door service were available at all points in the vicinity. If a shipper must operate his own trucks or use truck service to some points in order to have store-door delivery there, he might as well use the same trucks to send shipments to intermediate points as well, since the trucks are going through those points anyhow.

T. M. Cunningham, vice-president and general counsel of the Central of Georgia, cited statistics to show that motor transportation is not sound economically since its costs do not include an adequate charge for the use of the highways. Of the various kinds of truck operators, said Mr. Cunningham, those who cut most deeply into railway revenues are contract haulers and private haulers. He referred to a decision of the Georgia Supreme Court which held that the state can regulate the business and charges of even private truck operators since they are doing business on highways which are state-owned. Regulation is not effective unless all those doing business on the highways are regulated, he contended. Many private carriers he pointed out, are handling more tonnage than common carrier truckers.

Operations of Truck Companies

Two representatives of motor truck operating companies took the stand to describe their services. One testified that his company operates in North Carolina and South Carolina as a common carrier under certificates granted by the state commissions. Its rates, he said, are 25 per cent more than rail rates on all commodities except cotton piece goods, on which the truck rate equals the rail rate. The truck rates, he said, include a charge of eight cents a hundred pounds for the store-door collection and delivery. This company, he said, has secured its present volume of traffic, not by cutting rates, but by rendering a better service.

The other truck operator testified along similar lines, stating that his company operates 14 trucks and 7 trailers in intrastate service in Georgia. It has developed its traffic, he said, on a basis of better service, and at rates in some instances higher than rail rates. He mentioned the fact that 60 per cent of the traffic handled by his company is picked up by the trucks after railroad freight houses are closed.

Testimony in this proceeding was taken at Detroit, Mich. on Dec. 11. The only railway to testify was the Pere Marquette, the remainder of the hearing being taken up with the testimony of motor vehicle organizations and of the Michigan regulatory commission.

The Boston Hearing

The first witness at the Boston hearing was J. J. Pelley, president of the New York, New Haven & Hartford. Mr. Pelley described the characteristics of the New Haven's territory which make it particularly favorable for motor vehicle operation. He told of the development of motor coach and truck competition and its effect on railway traffic, and pointed out the lack of regulation of much of this kind of service.

The next witness for the New Haven was Arthur P. Russell, executive vice president, who described the organization and development of the New England Transportation Company, of which he was formerly president. At present, he said, the transportation company is operating 249 motor coaches on 61 routes, 26 of which are substitutes for rail service. Similarly, it is using trucks to meet the public demand.

Large Savings Effected

A. H. Fairfield, operating commerce assistant of the New Haven, followed Mr. Russell on the stand. The time element, he said, has become of paramount importance as a shipping factor, and the way freight train is unable to meet this condition. The New Haven established its motor truck services to meet the changed transportation situation, he continued, assigning trucks to zones of operation where they could replace way freight train service. As a result of its truck operations, the New Haven is able to save 6,734 train miles weekly, Mr. Fairfield said, the money saving being $12,-120 a week, or $630,000 a year. The New Haven's motor coach operations are saving the railroad $1,201,-543 a year in train operating expenses, on the basis of present operations. The road has eliminated 836,366 passenger train miles a year.

H. Price, passenger traffic manager of the New England Transportation Company, described in detail its motor coach operations. He said that 516 miles of routes were of a "rail-saving" character, while 1,741 miles of routes were supplementary to rail service. Fares charged are the same as rail fares, he testified, except where competitive conditions have compelled lower rates, between 1.7 and 3.0 cents per mile. Railway tickets are honored on the motor coaches, the transportation company receiving the redemption value of such tickets from the railway.

He mentioned the fact that short haul traffic of the motor coach lines is decreasing, while long haul traffic is increasing. The New England Transportation Company and its competitors are operating 21 daily schedules between New York and Boston, the standard rate of fare being $4.00. Several lines charge only $2.00, however, Mr. Price said, or a rate of 8 mills per mile. Under examination by counsel for a group of truck operators, Mr. Price admitted that the New England Transportation Company owns the Victoria Bus Line, operating between New York and Boston, as well as two other lines which are apparently independent.

J. A. Cunningham, freight traffic manager of the transportation company described the operation of its 90 trucks from 26 centers on the New Haven lines. These trucks, he said, have speeded up the service an average of 24 hours and have been effective in recovering traffic. The rate situation he described as chaotic, and he said that this condition has been aggravated by the fact that truckers are willing to carry freight for almost any price in order to secure return loads.

Truck Regulation Needed

Asked by Commissioner Brainerd what he would do to remedy the situation, Mr. Cunningham said that regulation should be provided which would standardize rates and service and eliminate the inequalities which now exist. In reply to another question, he said that the truck operations of the transportation company have been remunerative, aside from the savings in rail operation expenses which they make possible. Mr. Cunningham stated that store-door collection and delivery service will have to be provided by the railways. Commissioner Brainerd suggested at this point that federal legislation is not necessary to enable the railways to establish such service. In reply to further questions from

the commissioner and from the counsel of the motor truck operators, Mr. Cunningham stated that the transportation company charges the railway a mileage rate for the operation of trucks which handle railway freight, and that this rate varies in accordance with the proportion of railway freight and transportation company freight handled. In addition to the work which it does for the New Haven, Mr. Cunningham said, the transportation company carries on a business as an individual truck operator, with the rates in its tariff less than corresponding railway rates. This independent activity is necessary to meet competition, he said.

The next witness for the New Haven was H. W. Dorigan, assistant to the controller, who described the transportation company's methods of keeping accounts. Referring to payments made by the New Haven for the New England Transportation Company's trucking of railway freight, he said that the basis of the charges against the railway is the truck miles operated, where the trucks handle only railway tonnage. Otherwise, the basis of the charge depends upon the proportion of each class of traffic—whether railway or transportation company—to the total. In the year ended June 30, 1930, the transportation company handled 122,409 tons of freight for the New Haven and its steamship lines, while it handled 5,440 tons of freight for its own account. Under cross examination, Mr. Dorigan stated that the payments made by the railway to the transportation company are on a basis of cost plus 10 per cent.

Maine Central Testimony

This concluded the testimony of New Haven witnesses. The next witness was W. E. Reeves, assistant comptroller of the Maine Central. Mr. Reeves testified that the Maine Central operates a limited motor coach and truck service through a subsidiary, the SamOset Company. Mr. Reeves was followed by M. L. Harris, general passenger agent of the Maine Central. He said that the two motor coach lines operated were established to meet local conditions. On one line the fare charged is the same as the railway fare, while on the other it is five cents a mile. Mr. Harris advocated the regulation of interstate motor coach lines.

The last witness for the Maine Central was G. W. Miller, assistant to the freight traffic manager. He told of the operation of a trucking line by the railway between Bar Harbor, Me., and Bangor, on which the rates are the same as railway rates and the service includes store-door collection and delivery. He said that the company is about breaking even on this operation.

Boston & Maine Services

The first witness for the Boston & Maine was N. W. Hawkes, vice-president in charge of traffic. He described the Boston & Maine's efforts to meet truck competition and said that this competition had been intensified by the short distances between centers of population in Boston & Maine territory. Mr. Hawkes described the truck operations of the B. & M. through its subsidiary, the Boston & Maine Transportation Company, and referred to the fact that the commission had declined to receive a tariff of the transportation company providing for the movement of freight by the railway and transportation company jointly under an express tariff arrangement. Mr. Hawkes said that the law should not impose heavier restrictions on the truck operations of the railways than upon the operations of independent companies. If the railways cannot do what others do there should be truck regulation, he said.

Mr. Hawkes also told of the motor coach operations of the transportation company, and said that the Boston & Maine favors the regulation of interstate motor coach lines. Asked by the commissioner what purpose there is in railway's operating long motor coach lines, Mr. Hawkes said that railways desire to share in the revenue from this business which has been taken from the trains. The commissioner suggested that in operating long distance lines, railways are encouraging passengers to travel by motor coach, and he emphasized the point that a railway does not help its rail revenues by operating long motor coach routes. Under cross-examination, Mr. Hawkes testified that the transportation company lost approximately $4,000 on its truck operations last year and about $40,000 on its motor coach operations.

Following Mr. Hawkes, H. F. Fritch, president of the Boston & Maine Transportation Company, took the stand and submitted exhibits showing competitive motor coach lines in B. & M. territory. The 99 motor coaches operated by the transportation company are leased to it by the B. & M., which owns this equipment. The motor coach rates are lower than rail rates, he said, where the operation is carried on independent of the rail service, as between Boston and Portland, Me. Last year, the transportation company earned a profit of $25,000 on this line. The operations in general, however, are unprofitable except when consideration is given to the saving in rail operating expenses.

The next witness was F. J. Carey, manager of trucking operations of the Boston & Maine Transportation Company. Mr. Carey said that the transportation company contracts for all of the trucks which it uses, the transportation company paying the contractors an agreed rate and the railway reimbursing the transportation company for the truck costs and for overhead when the equipment is used in handling railway freight. In addition to handling railway freight, the transportation company carries on a trucking business on its own account, fixing its rates at such levels as are necessary to meet competition. Only station-to-station service is given where the truck operation is in replacement of rail service, but store-door collection and delivery is provided for in connection with the handling of the transportation company's own freight. The rates charged on the transportation company business are frequently changed from day to day to meet new developments in competition. In general, he said, truck rates are lower than the rail rates between common points.

Deficits Misleading

G. F. Glacy, controller of the Boston & Maine, described the accounting methods of the transportation company and features of the contract between the railway and the transportation company. He said that the transportation company had a deficit of $5,335 in eight months of 1925, a deficit of $22,753 in 1926, a surplus of $18,854 in 1927, a deficit of $21,478 in 1928, a deficit of $40,506 in 1929 and a deficit of $15,151 in the first ten months of 1930. He said that 75 per cent of the trucking operations of the transportation company are carried on directly for the handling of railway freight. He said that the figures indicating a deficit from the operations of the transportation company are misleading since they do not take into account that the transportation company permits the railway to save $195,000 a year in train operation expenses.

At this point F. J. Wall, general traffic manager of the New Haven, took the stand. He introduced as an exhibit a chart showing that the railways have not shared as freight carriers in the increased production during recent years. He said that the New Haven knows of 255 competitive motor coach services in southern New Eng-

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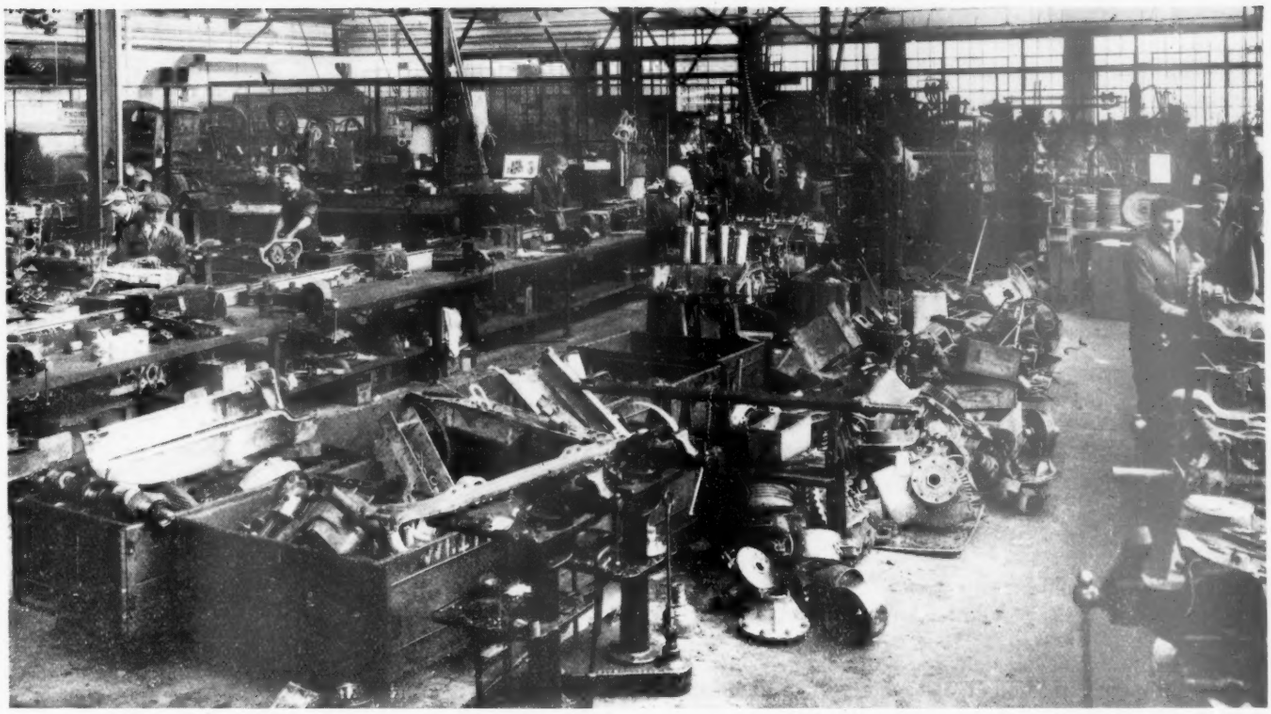


General View of the Engine and Axle Departments of the Newark Shop

Maintaining the Largest Fleet of Motor Coaches

Public Service Coordinated Transport does all repair work, except unit overhaul, in the service garages

By L. V. Lewis

Superintendent of Bus Maintenance, Public Service Coordinated Transport

PUBLIC Service Coordinated Transport operates the largest fleet of motor coaches in the United States. Since the initiation of motor coach service in 1924, the number of revenue vehicles operated has increased from 682 to the present total of 2,500, and in addition there are approximately 100 trucks and service cars.

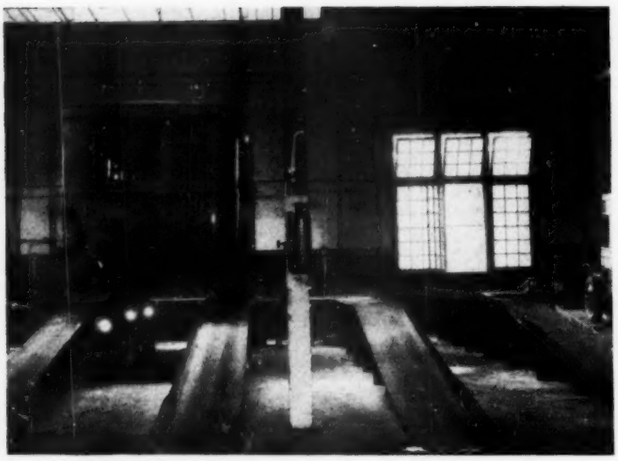
The motor coach operation covers a large part of New Jersey and gives practically every type of highway transportation, ranging from city to interstate and train connection service. The latter is supplied to the Baltimore & Ohio and to the New Jersey Central. Motor coaches are operated between Newark and Elizabeth in the Baltimore & Ohio train connection service, meeting daily ten eastbound and nine westbound trains at Elizabeth. Public Service coaches meet the "Blue Comet" of the New Jersey Central, twice daily, at Winslow Junction, giving a connecting service between this point and Bridgeton.

The total monthly mileage operated is more than 6,350,000 coach miles. Some of the motor coaches average over 300 mi. per day and total approximately 80,000 mi. yearly. This high average daily mileage of the motor coaches requires a rigid inspection and repair program and has resulted in the development of a highly efficient maintenance organization.

The territory is divided into seven divisions in which are located a total of 47 service garages. The southern division has its headquarters in Camden, and the six northern divisions, located throughout Northern New Jersey, have headquarters in Newark. Each division has a superintendent of maintenance who is directly responsible for the equipment in his division. Under the division superintendent come the garage foremen, each division having several operating garages.

The southern division has its own repair shop, located at Camden, which is equipped with machinery and tools for making both major and minor repairs to motor coaches. In the northern division, the Newark shop acts as a base upon which the operating garages call when in need of unit material and assistance.

Under the self-maintenance system, which is now in operation, most of the repair work is accomplished at the outside garages, but coaches and units which cannot



Inspection Ramps in One of the Operating Garages

readily be repaired in this way due to accident or the need of complete overhaul and rebuilding, are sent to the division repair shops.

The maintenance plan is based upon the principle of keeping a sufficient number of spare units on hand in the repair shop to service the various makes of motor coaches operated in the divisions. When a unit is in need of extensive repairs, which cannot economically be made at the garage, it is sent to the repair shop, and a similar unit is immediately returned. This is installed by the garage force and a long delay avoided. The damaged unit is repaired and made ready for another emergency.

Units coming into the shop for repair, and repaired units leaving the shop, are taken care of by the stores department trucks which make periodic deliveries to the various garages.

Largest Repair Shop Located in Newark

The Newark repair shop, including the stores department, occupies a single building having an area of approximately 32,000 sq. ft. Facilities are provided for doing all kinds of motor coach repair and reclamation work. Six departments are needed to handle the work, sent in from the different divisions: Emergency service department; parts cleaning department; unit overhaul department, which includes motor, transmission and rear end repair; machine and welding shop; electrical department, including a battery room; and the radiator department.

Units coming into the shop for repair are first handled by the emergency service department, which keeps a record of all incoming and outgoing units. They are then cleaned, dismantled and checked by an inspector who determines just what work is to be done, and makes out a shop order which follows the unit through to the completion of the work. Inspectors from each department watch the process of repair and test the units as they are completed. The necessary new material for repair work is ordered from the stores department, which is located in the shop building.

Completely Equipped Machine Shop

The machine shop is fully equipped to handle all kinds of repair work, including regrinding pistons, motor blocks and crankshafts. A large amount of salvage work is carried on in this department, and also some of the repair parts are machined. Wherever possible parts, which have been replaced, are built up by either electric, acetylene or aluminum welding, then remachined and placed back in service. This has resulted in saving a large number of the parts which would otherwise be thrown away.

The radiator department repairs all types of radiators used in the transportation service, and also assembles new radiators which are used for replacement purposes. A large number of sheet metal parts are made, such as hoods, fenders and gas tanks, which would otherwise be purchased outside.

The electrical department does all work in connection with the ignition and lighting systems of the coaches, including the overhaul of starters and generators and the repair of batteries. New batteries are also assembled for replacement service.

All Repaired Units are Tested in the Shop

All units undergoing repair are carefully tested before they are placed back in service. A 100 h.p. dynamometer is used to measure the output of each gasoline engine assembled in the motor department. The procedure is to run the dynamometer as an electric motor for a given period with the gasoline engine connected, after which the gasoline engine is placed under its own power, the dynamometer acting as a generator. The load is indicated by a hydraulic torque indicator, and can be easily converted to horsepower output. Every engine must be entirely free and develop a predetermined amount of power before it is passed by the inspector. This shop testing of rebuilt engines has reduced road failures to a minimum. Rear axles are also tested on a special dynamometer.

When a coach is sent to the shops for repairs, it is first thoroughly inspected and then dismantled, and the various units to be repaired are tagged for identification and sent to the proper departments for repair. Completed units which have been previously repaired, are then installed, thereby reducing the coach's time out of service to a minimum. After the coach has been reassembled, it is carefully road tested by an inspector.

All new motor coaches come to the shop for inspection and adjustment. The engine is adjusted, the electrical equipment is set for proper operation in the particular service intended, and the coach is completely checked and road tested before it is released to the outside garage.

When a coach becomes obsolete and unfit for service it is sent to the shop for salvage. Some of this old equipment can be reconstructed into service cars, wreckers, stores department trucks and tank wagons, where the service is less severe.

The maintenance schedule calls for the inspection of

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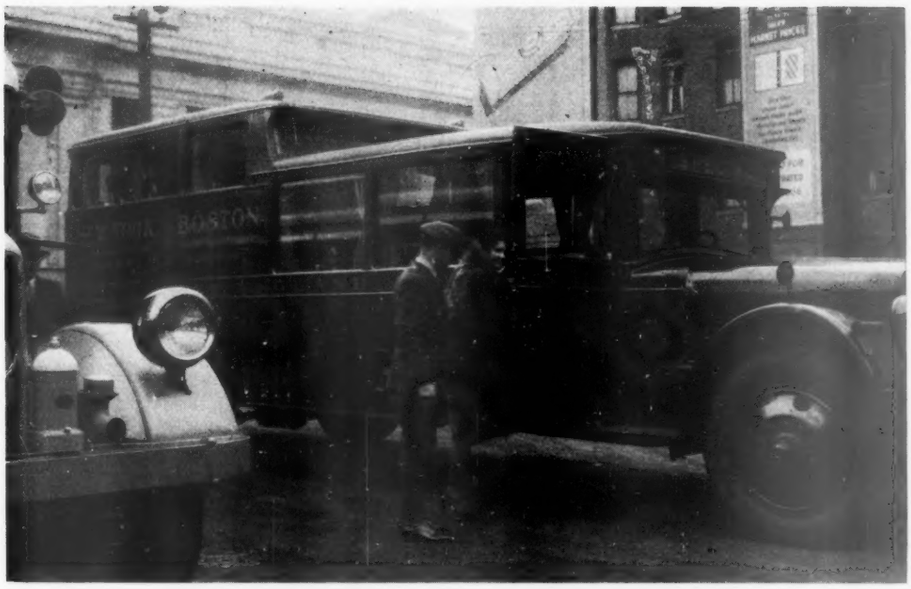
Dynamometer Stand for Testing Gasoline Engines



The Operator Should Assist Passengers In Entering or Leaving the Coach

N. E. T. Awards Safety Insignia

Development of the safety program of the company and the results obtained over a five year period

By H. M. Walker

General Superintendent, New England Transportation Company

THE New England Transportation Company launched its larger highway operations in January and February, 1926, and subsequently extended its routes and schedules to the point where the operation involved approximately 800,000 coach miles per month. Its operations today, including its subsidiary lines, which involve motor coach, truck and service vehicles, represent approximately 1,000,000 vehicle miles per month. The company is operating 468 units employing 539 operators. It extends over 1,575 miles of highway in southern New England, and the service, both freight and passenger, is co-ordinated with that of the New Haven railroad. The company, including its subsidiaries, is divided into six operating divisions. In every section, safety is a fundamental requirement.

At the inception of operations, certain fundamental requirements had to be met by applicants for employment, these including vision and color perception tests, a physical examination and satisfactory references concerning past employment. The vision and color perception tests together with the physical examination, were among the railroad requirements for men entering rail service at that time, and they were adopted as standard for applicants entering the motor coach service.

In addition to these requirements, the applicant must have had previous experience in driving heavy vehicles and be competent to acquire the special operator's licenses required in the respective states through which the operation extends.

Subsequent to these requirements, the applicant is required to ride over and observe the physical characteristics of the routes covered by the division to which he has made application for employment. He must then pass a satisfactory examination on the physical characteristics of the routes; examination being conducted by some official of the division who has been assigned this particular responsibility. After passing these various requirements satisfactorily, the applicant is assigned to service.

Early Regulations Based Upon Rail Experience

The initiation of special training methods devolved upon the officers of this company, none of whom were possessed of any previous experience in highway operation, and who, therefore, drew on their experiences in rail operation in setting up the operating regulations.

It first became necessary to issue instructions concerning matters of operation, and next it became necessary to know that men not only read but understood such instructions, and furthermore that they carried them out in a practical way. The company officers themselves were by no means clear, in those days, on any of these matters, but out of their experience certain practices were formulated and regulations drawn to govern safe operation. This knowledge became the basis upon which organized safety work was to be established.

I believe that our experience has been somewhat similar to that of similar operations inaugurated in the last

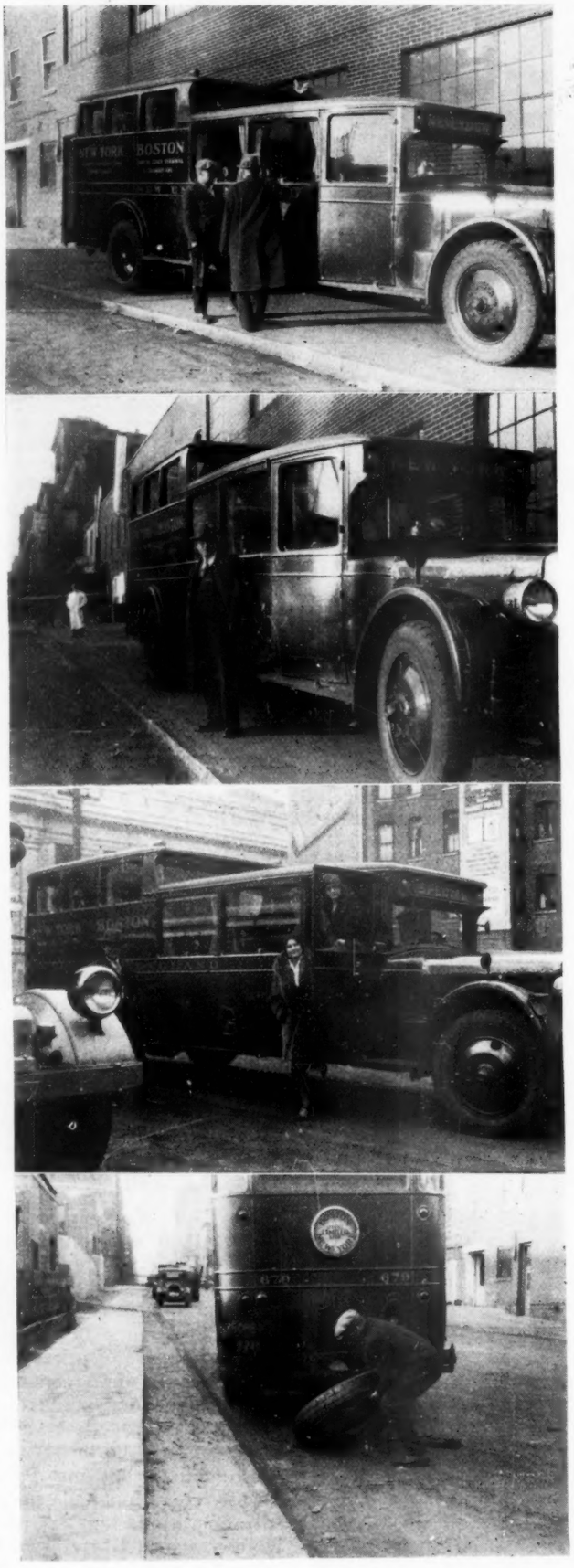
five years. There was no one to go to for advice, as the advice needed was that which would have been the outgrowth of experience. Each company, I believe, has been forced to write its own history on this basis and, in the end, if the experiences of the various companies were reviewed, I am sure there would be a great similarity in the objectives, aims and results which the respective managements undertook to accomplish.

Operating statistics were available, but without comparative data from which to make comparisons, none could be satisfied that their particular methods of operation were productive of the best results.

We were therefore obliged to feel our way along. Five years ago the physical condition of the highways was not what it is today.

Neither were the recording of accidents and the causes leading up to them handled as thoroughly by the public authorities then as is now the case. In fact motor coach operators had not been trained to intelligently report on accidents and the public authorities did not have the proper organization to record such statistics. It was much of a hit or miss proposition. There was a feeling, in those days, that a highway accident was of minor significance, and as long as it did not involve criminal action or police attention it was all in the day's work. I found operators to be more or less indifferent to these hazards, considering them a part of the business and that they did not require serious attention on the part of anyone.

Those of us with previous transportation experience were mindful of the fact that organized transportation must offer safe and dependable service to its passengers and that this could only be accomplished by providing operators who, by their personality and ability, would reflect such a feeling of confidence upon the passengers riding with them. The cost of highway accidents, once the statistical matter was assembled became apparent to everyone. These factors quickly drew the attention of the operating staff to the fact that if motor coach transportation was to become an effective reality, it must be so conducted that the travelling public and the public authorities would fully appreciate the service which the companies were attempting to render, and respond accordingly.



How It Should Not Be Done. Illustrating Some of the Common Causes of Accidents

It first became necessary to train men to report intelligently whenever they were involved in an accident, and accident report blanks were developed which, when intelligently executed, rendered a clear and concise account of any personal injury and property damage. This required concentrated effort upon those in charge of supervisory work, to follow up and instruct and also to personally investigate each accident and, where necessary, to go over the accident at the scene with the operator. Out of these experiences it finally became definitely clear that accidents were usually the outcome of the combined results of misjudgment on the part of more than one of the operators of the vehicles involved, to the extent that had either of such operators reacted properly to the situation immediately preceding the accident, it would have been avoided.

The outcome of this experience assured the officers that they had much in the matter of information to give to groups of operators, and it was therefore decided to hold safety meetings in the larger centers of operation. For a considerable time these meetings were held in series throughout the entire system. The hours of the meetings were staggered to reach the men who reported early and those who reported late. At these meetings we dwelt

largely on the feature of intelligent and concise reports, with the belief that the details of such reports would awaken in the minds of the men a sense of judgment that, when properly developed, would react in advance of the moment of an impending accident to the end that they would more effectually move to escape.

Experience indicated that it required time for the average man to absorb these teachings. A new man was made to understand that his employment was probationary and permanency was assured only by rendering satisfactory service.

Safety and Courtesy Stressed

The instructions were aimed to teach men to observe the practices of safe driving; to assume an attitude of courtesy in their contact with the public; to avoid handling of equipment in a way that would be abusive to it mechanically; to respect the rights of other users of the highways, and in all cases of doubt to give way to the other vehicle.

To encourage men in these respects, the company has always endeavored to provide vehicles that are safe to operate, and to that end has spent, in mechanical maintenance, a considerable part of its earnings which is really chargeable to safe operation. Experience has indicated that men do a better job when operating vehicles that are mechanically sound and that any condition that has a tendency to create worry in the mind of the operator detracts to that extent from what would otherwise be full and complete attentiveness to his work.

The Proper Way to Remove the Spare Wheel

At this stage consideration was given to acknowledgments for meritorious operation. The bonus system was not adopted. Instead an insignia was devised to be worn on the right sleeve of the uniform coat. It consists of a bronze star, embroidered in silk, to indicate that the wearer had gone six months without any accident for which he had been judged responsible. A silver star is one given where the man has gone one year with a clear record, and a gold star denotes two years. Beyond this, we agreed that if a man went five years without an accident for which he was responsible, he would be awarded a gold star with a diamond setting.

Accidents were then grouped to indicate those occurring on the highway or off the highway and those involving personal injury to either a passenger, employee or other person. An off-highway accident, such as might occur in a parking area or inside of the garage, and for which the employee would be held responsible, would not influence the matter of wearing the no-accident insignia which relates only to accidents occurring on the highways. The record of each driver is carried in the division offices and upon this record the insignia is conferred, or conversely the right to wear it is denied. The periods mentioned are not by calendar dates but run from the date of the last accident for which the employee was judged responsible. It is a rule that operators who have obtained the gold star and subsequently have been held responsible for an accident are required to remove the insignia. In order to again acquire the right to wear such insignia, they must pass through the required length of time with a proper accident record.

There has been a gratifying reaction to this rule. The loss of the right to wear the insignia is felt keenly by the employee involved, and, in most cases, makes him more receptive to instructive talk on the matter of how the accident occurred and what simple reaction on his part would have avoided it.

Results Obtained by Keeping Accident Records

From individual service records, the officers are able to determine which employees have the greatest number of accidents. An employee may be continually involved in something of a very minor nature but of a frequency that not only becomes annoying but also costly. The records of others will indicate no accidents for periods of time varying from a few months to two and three years, and then suddenly they will become involved in an accident which is difficult to account for but which sometimes can be explained by the erratic action of the driver of the other vehicle. The nature of these accidents is usually more serious in the matter of injuries and costs than is the case in accidents involving the operator who is prone to small troubles but apparently keeps free of major accidents. These conditions give rise to the reasoning that men, like machines, weaken under continued strain. It emphasizes the point that operators must have sufficient rest, be free of worry and have no physical ailment.

In the matter of physical condition, the men may be required to submit to physical examination, the results of which determine whether or not he will be continued in the service or required to follow out the instructions of the physician.

We try to train men to the end that, by anticipating trouble before it happens they can act to keep clear of it. There are instances where the operator sees clearly what is occurring immediately in his view and yet for some reason fails to react. The man involved is unable to explain it; he sees it, and yet makes no effort to keep clear. Others are able to respond quickly, and they are the ones who hold the most enviable safety records.

Habits of the Operators Are Investigated

It is necessary in motor coach transportation that the division officers know intimately the habits and conduct of the men under them while they are on duty. By their observations, both while riding the coaches and while on their routes in other means of transportation, they see what is going on and irregularities are quickly investigated. For this purpose the company provides service automobiles so that those in charge may be able to make their personal observations at any point. I believe this has been productive of good results.

The operator who responds to the rules and regulations is more safe both to himself and to others on the

(Continued on page 1415)

Why Use Motor Trucks?

As a part of railway equipment, they can reduce expenses, improve service and meet competition

By L. B. Young

Vice-President and Manager, Pacific Motor Transport Company*

STUDIES made indicate that it costs more, as a rule, to haul freight by truck than by rail, and for that reason, a general substitution of motor trucks for freight trains is not recommended. The trucks, however, offer so many other advantages that their use as auxiliaries to rails is well worth the consideration of any railroad management.

Among possible others, there are these three principal purposes for which trucks might be used by the railroads:

1. To reduce operating expenses.
2. To improve service.
3. To meet truck competition.

Of these, let us consider the first two, together.

In the first place, to suggest that railroads should use trucks for the purpose of reducing operating expenses sounds rather paradoxical in view of the opening statement that the haul by truck is more expensive. As a matter of fact, the truck haul generally does cost more. For example, an analysis by the General Motors Corp., published in the August, 1930, *Motor Transport Section,* indicated an average cost for large trucks of 23.6 cents per mile, and an average pay load of 14,442 lb. Typical railway figures indicate an average cost of 17 cents, and a pay load nearly twice that of the trucks. Reduced to a ton-mile basis, the comparison would be:

Cost by truck .....3.26 cents
Cost by rail ..... 1.50 cents

As a general rule, these figures appear to be fairly representative. Exceptions, however, are so inevitable that no rule is without them; and there are many exceptional cases where trucks not only will be cheaper, but will provide greatly improved service. Look at some illustrations on the map.

Some Specific Examples

From A to C is 50 miles; from C to E, 50 miles. Merchandise and other cars for E are set out of a main-line train at C, where they are picked up by a local train which operates daily between C and E. Merchandise for the three small and one large point on the E branch aggregates 20 tons a day. E originates a daily average of two cars of outbound dead freight of such character that no more than tri-weekly service would be necessary, were it not for the merchandise. If the local reached E early in the morning, its crew would run into overtime waiting for afternoon loads out. To avoid this expense, the local's schedule called for 2 p. m. arrival at E, which is most undesirable service for l.c.l. freight. Here is what the use of a truck and trailer between C and E accomplished:

1. Daily merchandise service into E by 7 a. m. instead of 2 p. m.
2. Saved 200 box-car miles a day.
3. Reduced train service from 6 days to 3 days a week, saving
   a. 50 train miles a day (average).
   b. $18 train crew wages a day (average).

The truck service costs $27 a day. This same truck also carries merchandise for K, merchandise which previously had moved tri-weekly by rail, thus improving service into K, and saving an additional 100 car miles a day that are not included in the figures just given.

Identical situations exist between C and D, and between G and L. In practically every instance, the substitution of trucks for the primary purpose of improving service will automatically carry with it some incidental savings in operating expense; and, similarly, a truck operation designed to reduce expenses almost invariably will result in some incidental improvement in service.

Take the situation between M and F. The distance is 100 miles, and along the line are many small towns and settlements, all depending on A and B for their supplies. The railroad operated a local train from C to M only, with only a through train beyond. A local train operated from F up to M. Under this schedule, all l.c.l. originating at A and destined to points between M and F would go in the through train to F, there to be picked up by the northbound local and peddled back to the points between F and M. With this arrangement, merchandise out of A tonight would reach F tomorrow afternoon, leave F in the local day after tomorrow morning, and reach its destination in the vicinity of M day after tomorrow late in the afternoon, for delivery to the consignee the morning of the third day after leaving point of origin.

Motor trucks, substituted primarily for the purpose of improving service, complete all deliveries between M and F by the afternoon of the first day, instead of the morning of the third day as with rail service. Complete truck operation costs about $150 a day. This is gross, and certain credits are yet to be taken for incidental savings in the operation of the local train. The train itself could not be taken off, but these savings were made:

1. 600 car miles a day.
2. $16 a day overtime.
3. 6 cars per day.

The full gross cost of truck service in this case was justified by the improved service, even if there had been no incidental, and partially off-setting, savings. But the point is that trucks put on purely to improve service almost invariably will automatically compel some partially, though not fully, compensating savings in rail expenses.

Make Estimates With Care

Extreme care, however, should be exercised in figuring savings in rail expense, either for the purpose of determining whether trucks can be operated more cheaply or to determine what off-setting credits can be applied against the gross cost of trucks put on to improve service.

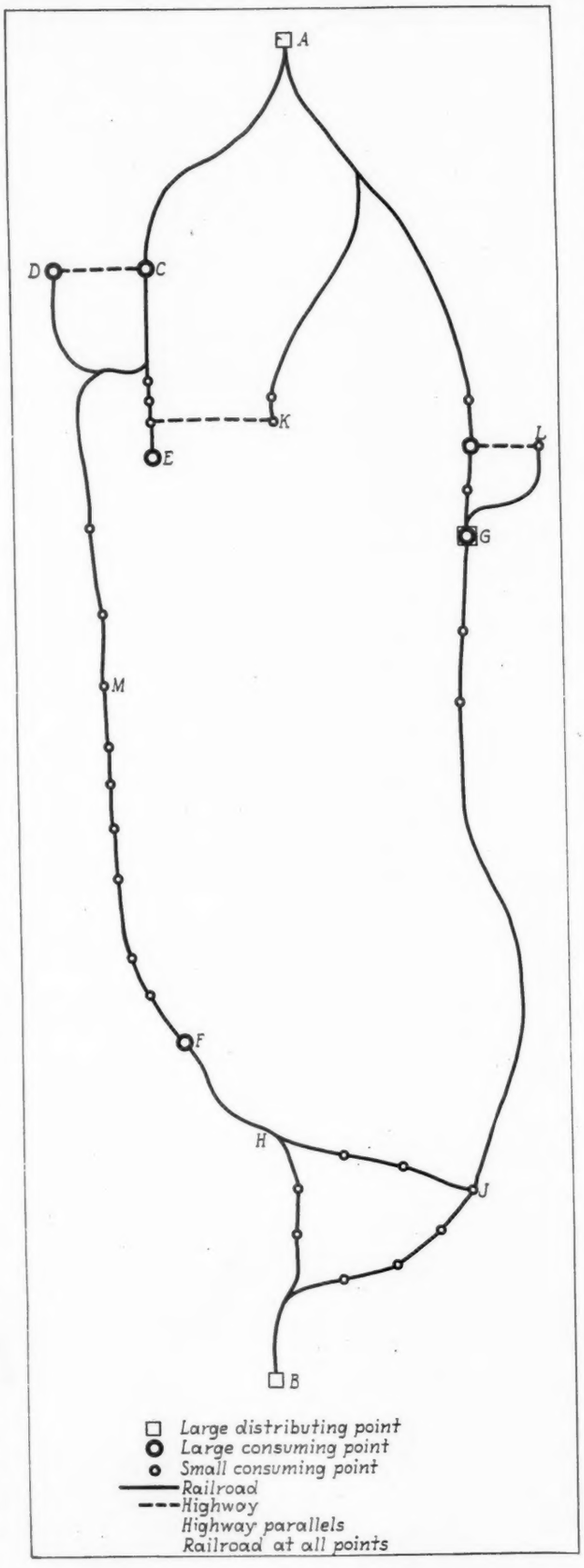
For this purpose, one cannot safely rely on general

* This article is taken from a lecture by Mr. Young before a class in Traffic Management.

information. Specific detailed analysis of each cost is necessary if accurate data are to be obtained. The point is vividly illustrated by this exaggerated example: A railroad's total operating expense averages 17 cents a car mile; by putting on a motor truck, we can save 100 car miles; it follows, then, that we have saved $17. Obviously, no such saving actually has been made. To carry the exaggeration further in explaining why $17 has not been saved, it is only necessary to realize that the 17 cent average includes, for example, the cost of maintaining right-of-way fences; and we know that the amount the railroad will spend on the maintenance of fences will not be reduced by the saving of the particular one hundred car miles we have in mind.

The cost of fence maintenance is used, of course, merely as an illustration. There are many other items of expense making up the average, which are not affected one way or the other by reduction either in car miles or train miles. Factors other than cost items also should be carefully considered: The direction of empty car movement; guaranteed train crew wages regardless of reduced hours; balancing power, and so on. In other words, what you want to determine is how much less or more actual cash money—commonly referred to as "out-of-pocket" expense—will the railroad spend after putting on motor trucks than it spent before. Point of view makes a lot of difference sometimes in the preparation of such figures. The saving to be made by trucks, as estimated by an exponent of the trucks, might not bear analysis by an equally clever analyst who favored rails.

But it appears that the greatest need that the railroads have for trucks right now is for the purpose of meeting the competition of motor truck haulers who give store-door pick-up and delivery service.



A Typical Territory Where Trucks Are Successfully Operated

Store-door pick-up and delivery of freight by the railroads, by the way, is no new thing. To patrons located on industry tracks, the railroads always have given such service, but for carload freight only. That is to say, for a carload shipper with an industry spur, the railroad will spot an empty car, call with a switch engine for the load, and on arrival at destination, deliver it to the consignee's warehouse track. This service is justified, apparently, by the fact that the full capacity of the car is used for the one shipment, going to one consignee, at one destination; the contents of the car require no handling by the railroad; and since the car must be spotted somewhere, it probably costs but little if any more to place it conveniently at the shipper's warehouse than it would to place it on a team track or at the freight depot.

For l.c.l. shipments, however, it has not been the practice of the railroads (except in the case of trap-cars) to provide pick-up and delivery service. Railroad machinery—the box car and the switch engine—are not designed for it. An l.c.l. shipment might be anything from a small package to several thousand pounds, and might or might not be coming from or to a warehouse located on rails. Even for those located on rails, to send a box car with a capacity of 30,000 lb. after such a shipment, using several hours time of an expensive switch engine, would be both costly and impractical. To switch the car around, as you would a motor truck, to various shippers until it secured a capacity load would take several days, and would be equally expensive and impractical.

For these reasons, the railroads have required

that l.c.l. freight be brought to the freight depot where a number of small shipments can be consolidated into one so-called "merchandise" car. The motor trucks, however, have changed this. They give store-door service, not only for carload but also for l.c.l. freight, and if the railroads are going to meet truck competition, it appears that they will be obliged to do the same thing.

Types of Store-Door Service

There are, among others, two ways they can do it:

1. Operate trucks on the highways, just as other truck operators do; or
2. Use trucks for pick-up and delivery work in terminals, and make the line haul by rail.

Already it has been shown that, with exceptions like those mentioned, it costs less to haul by rail than by truck; which seems to decide that of the two plans just mentioned—100 per cent truck, or combination truck and rail—the latter is much to be preferred. I heartily favor it. There is no doubt it is cheaper. It avoids new investments, and it can be made to provide service in every respect equal to that which can be provided by trucks operating on the highway. Physically, the problem is a simple one. In the case of small l.c.l. shipments, the motor truck operators, as a rule, pick freight up in small trucks, haul it to their depot, transfer it to larger trucks and trailers for the line haul, and at destination transfer it back to small trucks for delivery. The railroads can do exactly that, using box cars instead of large trucks and trailers.

In the case of larger shipments, say 6,000 to 10,000 lb., the truck operator probably picks-up and delivers with his line haul truck, saving the cost of transfer. Here again, with a combination of rail-truck, the railroad can give exactly the same service, but in this case by a method different from that of the truck. The railroad still must make the transfer, just as in the case of small l.c.l. shipments, but that merely is an item of operating expense. The railroad's advantage in a cent-and-a-half ton-mile cost, compared with the truck's three and a quarter cents, as mentioned earlier, so far outweighs this cost of the additional transfer involved in combination truck-rail service, that the comparison is not even close.

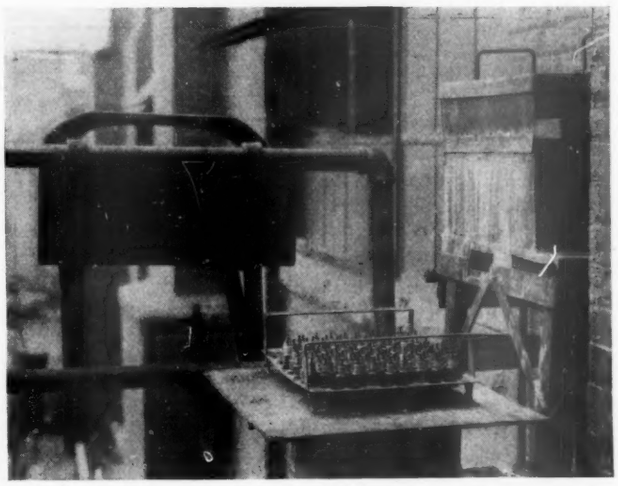
Motor trucks are a part of the general transportation machine, and their use by those in the transporation business appears to be inevitable.

Reclaiming Spark Plugs

SPARK PLUGS, which have become fouled by accumulations of oil and carbon, can be easily and quickly cleaned by methods which do not injure the plug and yet are not expensive.

The Surface Transportation Co., New York, has built a special cleaning and drying oven for this purpose, which has proven to be effective and easily operated. It consists of a gas heated tank, 12 in. by 20 in. by 10 in. high, for heating the Oakite cleaning solution. Above this and connected with the stack of the gas burner is a drying compartment about 6 in. high. The spark plugs are placed in a tray which holds each plug upright so that the electrodes will receive the greatest washing effect from the boiling solution. The tray, which holds 170 spark plugs, has handles on each end so that it can be lifted without disturbing the plugs.

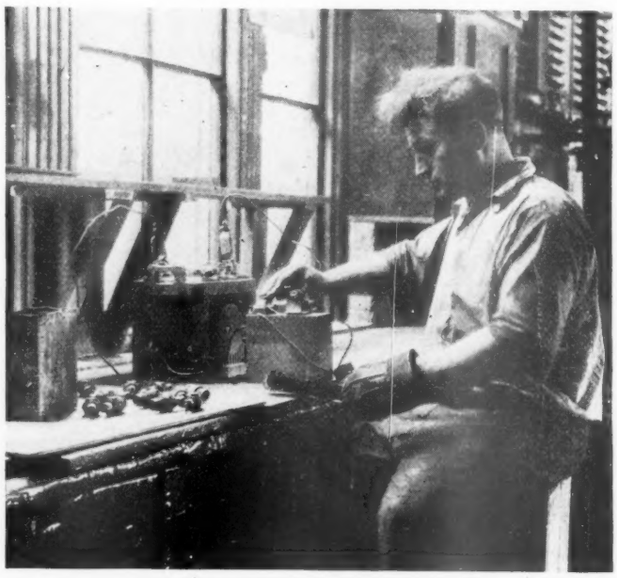
The process consists of submerging the plugs in the boiling Oakite solution for 3 or 4 hours to remove the grease and oil. After this they are placed in a 50 per cent solution of muriatic acid and water for 30 min. to loosen the carbon. They are then reboiled in the Oakite solution for 1 hour after which they are washed off with water under pressure. The tray is then placed in the drying oven long enough to thoroughly dry the plugs. While one batch is drying, another can be placed in the boiling solution. The cleaner wears rubber gloves to protect his hands from the acid.



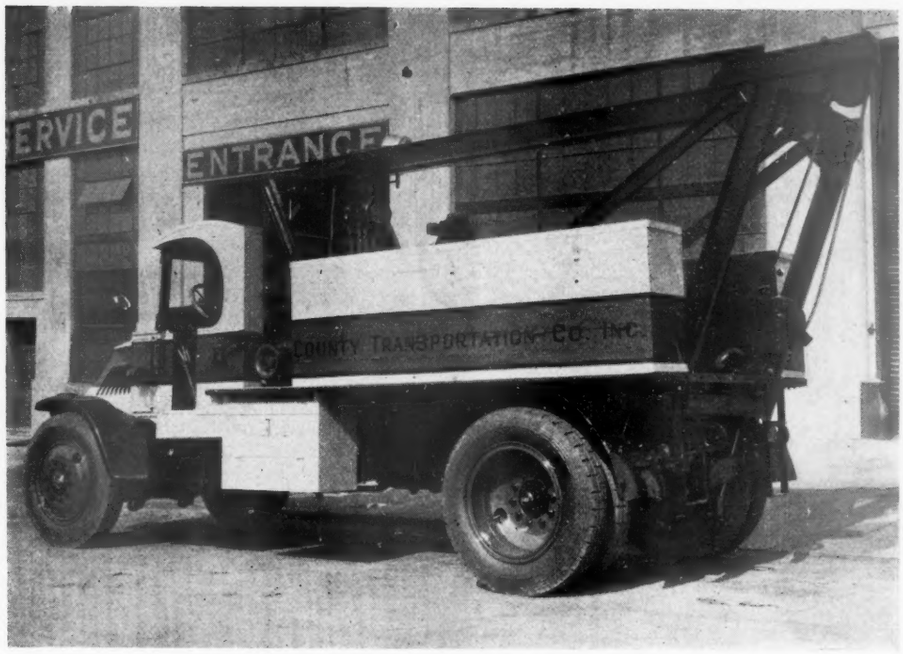
Spark Plugs in Tray Ready to be Placed in Cleaning Solution

After the plugs have cooled they are taken to a bench and tested, the apparatus consisting of a simple vibrating coil and a 6-volt battery. The electrodes and the threads on the shell are burnished with a wire brush to remove any loose particles of carbon, and the plug is then placed in the secondary circuit of the coil and tested for quality of the spark. The points are adjusted if necessary.

By means of this process about 90 per cent of the plugs can be put back in stock for re-use, the remaining 10 per cent, having cracked or broken insulation, being thrown out.



Testing Spark Plugs After They Have Been Cleaned



A Powerful and Speedy Wrecking Vehicle Owned by the County Transportation Co.

Wreckers—

Necessary or Unnecessary?

Operations giving frequent service in a relatively small area find wrecking equipment more useful than do intercity, long-distance lines

WHEN is it profitable to own and maintain wreck equipment? In the event of road trouble, is a wrecker necessary, or can a mechanic, with such parts and tools as he can carry on a service wagon, make the necessary repairs? If wreck equipment is owned, on what kind of a chassis is it mounted and what special mechanical devices, such as cranes, winches, towing devices, etc., have been found useful?

An inquiry on this subject, sent to some of the railroad motor transport operating officials, reveals that there is a difference of opinion on the necessity of owning wrecking vehicles. Generally, those operations which are relatively compact, having a large number of vehicles in a small territory, find a wrecker necessary, while those lines which extend over a large territory, having only a small number of vehicles at any time in one locality, usually do not have enough use for a wrecker to warrant the expense involved.

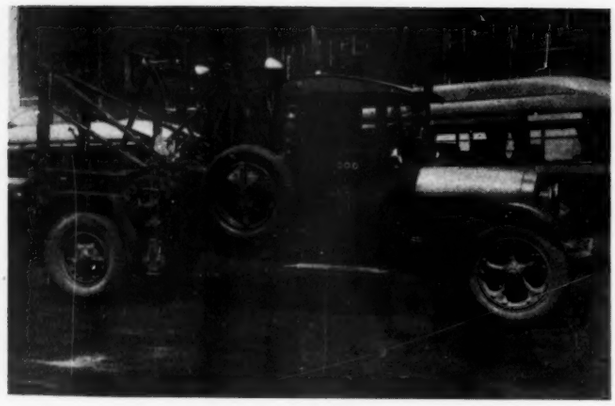
A good example of the first type is the County Transportation Company, a subsidiary of the New York, Westchester & Boston. The motor coach service of this company operates in co-ordination with the train service, which, during rush hours at the Port Chester terminal, necessitates a headway of only 10 minutes. The longest line operated is that to Stamford, Conn., about 10 miles.

The wrecking equipment owned by this company, shown in the illustration, is probably as complete and powerful as any in operation. It is sent out on practically all road calls and is frequently used at the request of the local police and fire departments. The equipment of this vehicle will be described later.

Reading Fleet Is Spread Over A Large Territory

The experience of the Reading Transportation Company illustrates the second situation, where the fleet is

A Service Wagon Made from a Rebuilt Sedan



These Vehicles Are Stationed at Division Repair Shops Along Lines of the Missouri Pacific Transportation Co.

spread over a large territory. D. W. Fisher, assistant superintendent, says, "We do not own or operate any equipment of this kind, our reason being that, while we have a fair sized fleet of motor coaches, they are scattered over a considerable territory, and consequently we have not found equipment of this kind necessary in any one district.

"Since the inauguration of our motor coach service over two years ago, during which time we have operated approximately 3,400,000 miles, it has been necessary to obtain a wrecker, to bring in damaged equipment, only three times. Road calls, due to mechanical trouble of one kind or another, are taken care of by the local supervisors, who are equipped with light service cars."

The Boston & Maine Transportation Company has a somewhat similar operating situation. R. C. Boyden, mechanical superintendent, gives their experience as follows:

"We have found, in the majority of cases, that coaches which are disabled to such an extent that they cannot be towed, can be temporarily repaired and hauled to the nearest repair point by a spare coach. The only equipment we have is a dual-rubber-wheel truck ambulance which has been used twice since it was purchased four years ago.

"During our operating period of five years, we have hired wrecking equipment less than ten times. The cost of hiring this equipment has been less than the interest charges would be for one year on a piece of wrecking equipment costing $3,000, which is a low price for such a vehicle."

Missouri Pacific Builds Own Wreckers

On the other hand, the Missouri Pacific Transportation Company, operating over a wide territory, finds wrecking equipment useful and has specially designed vehicles of this type stationed at the major repair points.

H. P. McDonald, superintendent of automotive equipment, says, "The Missouri Pacific Transportation Company operates in eight states, necessitating the location of service stations and garages at various points in our system. In connection with road service calls, we have provided wrecking equipment at major points, which has proven to be valuable when moving vehicles from one point to another for major overhaul as well as for taking care of those which must be towed in. We believe this type of equipment to be essential where operations cover a large territory. The type of wrecker which we use is capable of doing any wrecking job required in motor coach operation, including lifting the coach and pulling it from any angle or position. The equipment was built in our own shops and has several special attachments and rigging which are not supplied by manufacturers."

Mr. McDonald also describes an interesting type of service car, one of which is illustrated. He says, "In the beginning of our operation in 1929, we acquired quite a bit of equipment from the various coach lines which we took over. Some of this equipment consisted of 5- and 7-passenger automobiles, of various makes, which we could not use in our service. These were converted, at comparatively low cost, into service cars similar to the one shown, which was formerly a Buick sedan. These service cars are stationed at important points for use in emergency road calls and for transferring material."

Road Mechanics Correct Operating Difficulties

M. F. Steinberger, manager of highway transportation, Baltimore & Ohio, gives his experience as follows: "We have several small trucks which we use as service wagons and for emergency purposes, these trucks carrying wire rope and other supplies usually found necessary in the performance of average work of this nature.

"Our road calls have averaged slightly over one call per day, for several months. These calls do not involve the use of wrecking equipment but simply require the sending of a mechanic to correct difficulties which the drivers have been unable to correct themselves."

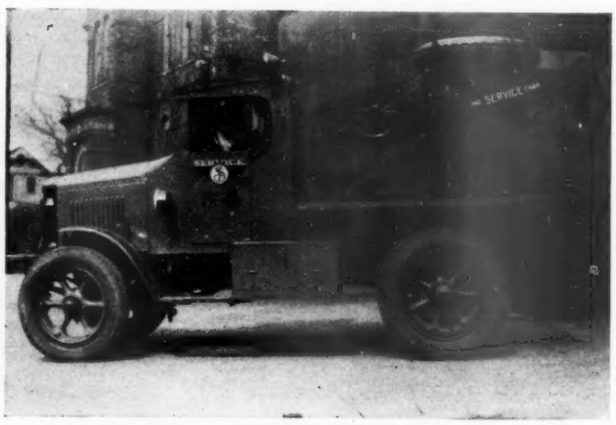
L. R. Coburn, superintendent, Indiana Service Corp., describes their wrecking truck as follows: "The chassis is a model 63-A, 3-ton International truck with a short wheelbase. It is equipped with 40 in. by 8 in. single pneumatic tires on the rear, and 36 in. by 6 in. pneumatics on the front.

"A Manley 10-ton wrecking crane, having two drums carrying double-block chain falls, using ⅜-in. steel chain, and one drum carrying ⅜-in. steel cable, is mounted on the truck. There are also two spotlights capable of throwing a beam of light 300 ft., in addition to the headlights and smaller spotlights. Extra equipment carried on this truck includes 500 ft. of one inch rope, jacks, tow pole, shovels, sledges, pinch bars, wood blocks, extra chains, fire extinguishers, lanterns, raincoats, rubber boots, etc.

"We use this wrecker for general towing and wrecking purposes, and in addition use it to a large extent in clearing the highway of automobiles damaged by contact with city street cars. We have also had numerous calls from other motor coach and trucking companies."

The County Transportation Company wrecking equipment, mentioned at the beginning of this article, consists of a Mack model AK chassis with a special,

(Continued on page 1415)



The Wrecker of the Indiana Service Corp. Has a Short Wheelbase Truck Chassis

Summarize Highway Operations of Class I Railroads

Interstate Commerce Commission makes public statistical summary of motor coach and truck services reported by major lines

THE Interstate Commerce Commission has made public a statistical summary of answers of Class I railways to the commission's questionnaire in Docket 23,400, Co-ordination of Motor Transportation, in connection with which hearings in various parts of the country are now taking place. This summary indicates that 32 Class I railways on June 30 of this year were operating 2,887 motor coaches, while 16 Class I railways were operating 551 motor trucks and 115 trailers. With respect to the motor truck operating data, these figures do not include the trucks and trailers operated by trucking companies under contracts with railways.

The Class I roads, on June 30, were operating motor coaches over 33,187 miles of intrastate routes and 23,040 miles of interstate routes. In the first six months of this year they operated 58,707,886 motor coach miles, of which 15,372,434 motor coach miles were in interstate service. Of the total of 34,113,361 passengers carried, 5,090,561 were interstate passengers. Revenue from interstate passengers was $3,371,391, while the total passenger revenue, including both interstate and

Table II—Motor Coach Operating Data Reported by Class I Railroads, Period January 1 to June 30, 1930

Name of Carrier	Number of Motor Coaches	Number of miles of routes		Number of motor coach-miles		Number of passengers		Passenger revenue	
		Intrastate	Interstate	Total	Interstate	Total	Interstate	Total	Interstate
New England Region:									
Boston and Maine	95	338.00	598.00	1,010,065	678,075	715,338	246,315	$229,611	$183,415
Maine Central	5	39.00	....	32,840	....	12,130	....	7,184	....
New York, New Haven and Hartford	638	1,767.91	2,174.75	11,455,808	3,809,922	22,329,369*	3,782,269**	3,156,013	1,149,830
Rutland	2	....	67.00	20,653	18,974	4,439	4,282	1,215	1,101
Total	740	2,144.91	2,839.75	12,519,366	4,506,971	23,061,276	4,032,866	3,394,023	1,334,346
Central Eastern Region:									
Baltimore & Ohio	27	602.50	60.00	653,212	16,440	183,813	653	102,496	788
Central of New Jersey	9	43.50	287.30	385,794	....	59,918	....	30,239	....
Pennsylvania	430	4,501.10	3,328.40	9,392,786	1,873,971	3,325,524	447,512	2,954,611	633,014
Reading Co. and Atlantic City R. R.	73	504.40	275.30	1,189,516	661,325	448,311	101,250	215,861	111,853
Total	539	5,651.50	3,951.00	11,621,308	2,551,736	4,017,566	549,415	3,303,207	745,655
Pocahontas Region:									
Richmond, Fredericksburg & Potomac	16	52.91	113.00	383,069	351,940	99,809	61,997	127,559	122,317
Southern Region:									
Atlanta & West Point	4†	136.00†	....	64,305†	....	26,065†	57†	9,720†	56†
Central of Georgia	5	145.00	....	55,920	....	7,612	....	3,803	....
Georgia	4	136.00	....	64,305	....	26,065	57	9,720	56
Illinois Central	1	99.00	....	33,133	....	5,098	....	7,901	....
Nashville, Chattanooga & St. Louis	3	27.20	....	28,523	....	5,432	....	3,664	....
Norfolk Southern	8	35.90	....	158,143	....	101,211	....	24,347	....
Seaboard Air Line	7	166.00	....	121,685	....	14,251	....	24,202	....
Southern	3	131.00	....	49,070	....	6,137	....	5,585	....
Total	31	740.10	....	510,779	....	165,806	57	79,222	56
Northwestern Region:									
Chicago and North Western	188††	1,356.00††	4,874.00	4,748,654††	3,280,279††	493,360††	....	1,006,537	....
Chicago, Milwaukee, St. Paul & Pacific	4	107.30	....	70,697	....	11,354	....	5,457	....
Spokane, Portland & Seattle	34	208.50	....	374,707	....	83,338	....	78,857	....
Total	38	315.80	....	445,404	....	94,692	....	84,314	....
Central Western Region:									
Chicago & Alton	10	114.00	....	99,138	....	23,251	....	14,149	....
Chicago, Burlington & Quincy	38	622.90	193.00	966,246	238,381	119,988	23,054	121,713	27,458
Colorado & Southern	23	269.00	....	394,366	....	77,625	....	93,011	....
Denver & Rio Grande Western	39	1,151.00	....	465,879	....	45,068	....	120,872	....
Southern Pacific	648	13,152.93	6,443.00	15,395,979	3,094,077	4,383,250	335,761	4,097,634	1,056,637
Union Pacific System:									
Los Angeles & Salt Lake	73	534.00	195.00	144,638	....	9,115	....	45,041	....
Oregon Short Line	87	1,554.00	1,703.00	2,075,864	....	276,943	....	447,374	....
Union Pacific	188	1,356.00	4,874.00	4,748,654	3,280,279	493,360	....	1,006,537	....
Total	1,106	18,753.83	13,408.00	24,290,764	6,612,737	5,428,600	358,815	5,946,331	1,084,095
Southwestern Region:									
Missouri Pacific	192	2,341.20	1,498.30	3,862,689	1,272,850	695,408	76,495	557,772	68,048
St. Louis Southwestern	74	995.00	1,195.00	1,168,058	....	....	....	177,423	....
Texas & New Orleans	147	2,192.00	35.00	3,864,651	76,200	505,313	10,916	940,680	16,874
Texas & Pacific	4	....	....	41,798	....	44,891	....	3,480	....
Total	417	5,528.20	2,728.30	8,937,196	1,349,050	1,245,612	87,411	1,679,355	84,922
Total, United States	2,887	33,187.25	23,040.05	58,707,886	15,372,434	34,113,361	5,090,561	14,614,011	3,371,391

* Includes 15,923,293, which represents fares collected.
** Includes 130,305, which represents fares collected.
† Returns duplicated in report of Georgia R. R.; eliminated from totals.
†† Returns duplicated in report of Union Pacific; eliminated from totals.

Table III—Motor Truck Operating Data Reported by Class I Railroads, Period January 1 to June 30, 1930

Name of Carrier	Number of trucks	Number of trailers	Number of miles of routes: Intrastate	Number of miles of routes: Interstate	Number of truck-miles: Total	Number of truck-miles: Interstate	Number of tons: Total	Number of tons: Interstate	Freight revenue: Total	Freight revenue: Interstate
New England Region:										
Boston & Maine	131	44	1,779.00	178.00	403,464	26,522	177,859	2,500	$409,865	.....
Maine Central	3	..	50.00	....	21,149	....	375	....	4,334	.....
New York, New Haven & Hartford	109	..	1,364.00	537.00	859,725*	....	96,363	....	258,686*	.....
Total	243	44	3,193.00	715.00	1,284,338	26,522	274,597	2,500	672,885	.....
Central Eastern Region:										
Baltimore & Ohio	25	..	20.70	17.70	12,881	5,942	12,078	1,279	24,067	.....
Central of New Jersey	2	1	65.70	....	20,262	....	1,029	....	10,104	.....
Pennsylvania	158	40	2,484.50	513.00	568,465	112,188	97,236	15,658	498,081	$64,020
Reading Co. and Atlantic City R. R.	2	..	55.60	....	8,182	....	....	....	....	....
Total	187	41	2,626.50	530.70	609,790	118,130	110,343	16,937	532,252	64,020
Great Lakes Region:										
Monongahela	3	..	43.00	....	21,032	....	2,206	....	3,922	....
Southern Region:										
Central of Georgia	4	..	110.50	....	34,510	....	2,642	....	7,757	....
Northwestern Region:										
Chicago, St. Paul, Minneapolis & Omaha	38	1	953.00	225.00	433,007	110,181	13,888	3,531	92,933	24,291
Great Northern	1	..	73.50	....	4,182	....	54	....	37	....
Total	39	1	1,026.50	225.00	437,189	110,181	13,942	3,531	92,970	24,291
Central Western Region:										
Chicago, Rock Island & Pacific	..	..	....	....	12,147	....	3,397	....	5,449	....
Denver & Rio Grande Western	16	..	541.00	....	195,732	....	5,656	....	64,943	....
Southern Pacific	16	..	135.00	....	42,262	....	476	....	5,191	....
Total	32	..	676.00	....	250,141	....	9,529	....	75,583	.....
Southwestern Region:										
St. Louis Southwestern	42	29	1,179.00	76.00	568,131	....	....	....	195,493	....
Texas & Pacific	1	..	8.60	....	6,102	....	....	....	....	....
Total	43	29	1,187.60	76.00	574,233	....	....	....	195,493	....
Total, United States	551	115	8,863.10	1,546.70	3,211,233	254,833	413,259	22,968	1,580,862	88,311

* Excludes $14,305, compensation received on mail contracts and 28,466 truck miles covering mail hauling.

intrastate passenger revenue, amounted to $14,614,011.

The roads reporting motor truck operations covered 8,813 miles of routes in intrastate service and 1,546 miles of routes in interstate service. The total number of truck miles operated during the first six months of this year they operated 58,707,886 motor coach miles, motor truck miles in interstate service. The aggregate number of tons of freight handled was 413,259, which includes 22,968 tons moved interstate. The freight revenue from interstate traffic was $88,311, while the total freight revenue, including the interstate traffic revenue, was $1,580,862.

Property Investment Shown

The property investment figures as of June 30 were consolidated to show the aggregate investment by each of the individual railways which participates in motor vehicle transportation, whether such investment is direct or through a subsidiary or affiliated company. They do not show the property investment of motor vehicle companies which are neither subsidiaries of or affiliated with railways, but which have contractual agreements with the railways for the tranportation of passengers or property beyond their lines or in substitution for rail haul.

The property investment in motor vehicle service reported by the Class I roads is shown in Table 1. Table 2 shows the motor coach operating data reported by the Class I roads, while Table 3 shows motor truck operating data.

The returns from steam railways of Classes II and III and from electric railways are now being tabulated by the commission. When completed, statistical summaries of these returns will be issued.

Table I—Property Investment in Motor Vehicles Reported by Class I Railroads as of June 30, 1930

Name of Carrier	Property Investment
New England Region:	
Boston and Maine	$728,921
Maine Central	49,703
New York, New Haven and Hartford	6,450,185
Rutland	15,110
Total	7,243,919
Great Lakes Region:	
Monongahela	7,490
Central Eastern Region:	
Baltimore and Ohio	481,116
Central of New Jersey	120,527
Pennsylvania	6,643,970
Reading Co. and Atlantic City R. R.	890,958
Total	8,136,571
Pocahontas Region:	
Richmond, Fredericksburg & Potomac	230,000
Southern Region:	
Atlanta and West Point	35,647*
Central of Georgia	60,733
Georgia	35,647
Illinois Central	11,466
Nashville, Chattanooga and St. Louis	41,401
Norfolk Southern	41,226
Seaboard Air Line	59,401
Total	249,874
Northwestern Region:	
Chicago and North Western	2,093,955**
Chicago, Milwaukee, St. Paul & Pacific	44,305
Chicago, St. Paul, Minneapolis & Omaha	281,503
Great Northern	2,273
Spokane, Portland and Seattle	274,404
Total	602,485
Central Western Region:	
Chicago and Alton	103,196
Chicago, Burlington and Quincy	313,638
Colorado and Southern	76,643†
Colorado and Southern	103,395
Denver and Rio Grande Western	273,240
Southern Pacific	10,407,704
Union Pacific System:	
Los Angeles and Salt Lake	3,687,515††
Oregon Short Line	1,131,377
Union Pacific	2,093,955
Total	18,114,020
Southwestern Region:	
Missouri Pacific	1,727,573
St. Louis Southwestern	1,247,020
Texas and New Orleans	2,457,822
Texas and Pacific	31,833
Total	5,464,248
Total United States	40,048,607

* Investment duplicated in returns for Georgia R. R. eliminated from totals.

** Investment duplicated in returns for Union Pacific; eliminated from totals.

† Investment duplicated in returns for Denver and Rio Grande Western; eliminated from totals.

†† Includes investment in lodge and hotel factilities as well as motor transportation facilities.

The British Highway Traffic Act

Power to license and regulate public service highway vehicles is placed in the hands of traffic commissioners

By Alfred W. Arthurton

British Railway Companies' Association

SELDOM are the recommendations of a royal commission so promptly embodied in legislation as those of the transport commission which formed the basis of the new Road Traffic Act. This act is the first really comprehensive measure for the regulation of motor vehicles in Great Britain since the early infancy of the motor car, and is a great legislative milestone, consolidating and bringing up to date the road traffic law.

The Locomotives on Highways act, of 1896, abolished the necessity for a red flag to be carried in front of a motor vehicle. Seven years later the Motor Car act of 1903 was passed, authorizing a speed limit of 20 m.p.h., and it was under the provisions of this act that the motor industry has been governed to this day. It might fairly be claimed, therefore, that motor legislation in Great Britain was no less than a quarter of a century overdue, and it was only to be expected that the rapid growth and development of highway traffic since the war would sooner or later call for a drastic revision and extension of the law relating to its control.

The urgency of the need for new legislation was recognized by the appointment, in 1928, of a Royal Commission on Transport. The commissioners, presided over by Sir Arthur Griffith-Boscawen, have already published two reports dealing with the control of traffic on highways and the licensing and regulation of public service vehicles, respectively, and upon these reports, as already stated, the Road Traffic act, which received the Royal Assent on August 1, has been largely based. The act has been designated by the Minister of Transport, Herbert Morrison, as "a great charter for the ordered use of the King's highway." Much still remains to be done before it can be brought into full operation, but it is hoped that it will be possible to bring the various parts of the act into force on various dates which have been already announced.

Three aspects of the new law deserve special attention. First, there is the question of speed restriction and safety on the highways; second, the transference of the power to license and regulate all motor vehicles, particularly public service vehicles, from the hands of local authorities to traffic commissioners; and, third, the changed powers of local authorities in the matter of owning and operating transport services themselves.

It would be wrong to belittle the importance of certain other parts of the act, such as that which introduces compulsory insurance against third-party risk, or those which affect the hours and conditions of persons employed upon the road, but they are of secondary importance in comparison with the three main questions already mentioned.

Speed Limits

In Part I, which came into operation on December 1, 1930, a drastic revision is made of the law relating to the legal speed limit, and the abolition of the speed limit of 20 m.p.h. for light motor cars and motorcycles merely gives statutory recognition to a fact. It may seem strange that at a time when highway accidents are increasing to such an alarming extent there should be a complete withdrawal of the speed limit for the private motor car, but it has been established that speed in itself is seldom the sole cause of accidents, and definite steps are now to be taken to reduce the number of accidents by adequate provisions and severe penalties against dangerous and careless driving. The dangerous or reckless driver, on summary conviction, becomes liable for the first offense, to a fine of as much as £50 ($243) or to imprisonment, and for a second offense, more serious penalties may be inflicted, including the loss of his license to drive.

While speed is a factor in dangerous and reckless operation, it is considered essential that motorists, magistrates and the police should concentrate on discouraging dangerous driving in all its aspects. Arrangements are being made for the organization of motorcycle units in the various police forces of the country for the better control of highway traffic and the proper enforcement of the traffic act. This new force of traffic police is to be ready for service early in 1931 and is to number a thousand strong. It is hoped that their influence will be found to operate not in vexatious interference with good drivers, but as a wholesome restraint upon "road hogs."

Appropriate speed limits will still be applicable to other classes of motor vehicles. In the case of passenger vehicles adapted to carry more than seven passengers, and for all freight vehicles fitted with pneumatic tires, there is a speed limit of 30 m.p.h. Lower limits are laid down for other types of vehicles according to their weight and tire equipment.

Motor Coach Speeds

The speed limits imposed by the act on public service vehicles will result in a drastic revision of the speeds of motor coaches which have taken so much traffic from the railways in recent years. There will certainly be a curtailment of the activities of the motor coach, for it is well known that, although timetables are not always published, through average speeds are regularly maintained over many routes which could not possibly be so maintained unless speeds of well above 40 m.p.h. were run over considerable portions of the route. The enforcement of a maximum speed of 30 m.p.h. upon motor coaches will have the effect of putting a stop to many long distance services. Many of these services are proving a source of serious embarrassment to the railways since their schedule of fares is little more than half that charged for rail transportation.

It is speed which has largely brought about the success of the motor coach in recent years, and the one thing dreaded by the motor coach combines is the enforcement of a rigid speed limit which would make long distance

travel by highway inordinately long and tiresome. Until recently the speed limit for motor coaches was 12 m.p.h. and at such a pace the journey from London to Edinburgh would take about two days and a night. The raising of the speed limit to 20 m.p.h. did not improve things much and a lengthy journey was tedious. So the motor coach companies, like the private motorist, paid little attention to statutory speed limits. The result was that on main highways last year the police started a campaign of speed traps but this activity was not maintained as a general procedure and the motor coaches have, as a rule, run at their own speeds without interference.

Motor Coach An Auxiliary To Railways

At present looseness or absence of control is allowing the highways to be used for purposes for which they were never intended and for which they are often unfit and unsafe. Motor coaches are using roads as trains use railways, but with none of the safeguards imposed on the latter for the protection of passengers and the public. There is hope that the new act, with its coordination of traffic areas and its speed limits for heavy vehicles, may evolve some order out of this chaos. If a remark attributed to the Minister of Transport in a recent interview, means what it says, the authorities seem to have grasped the truth. Mr. Morrison remarked that high motor coach speed on the highway is unnecessary and unsafe, and that the public must not expect to travel as fast by highway as by rail. Coach services, in trying to compete with railways in speed, are putting the highways to improper and unnecessary use. The proper function of the motor coach is as an auxiliary to the railways. If this fact is understood and acted upon, the highways will be relieved of a good deal of danger and congestion and the railways of wasteful and damaging competition. In future we shall see motor coaches running to schedule and, in a coordinated system, linking up the highway and rail facilities of the country.

Heavy Vehicles Subsidized

These motor coach services are in reality being run largely at the public expense since the highways on which they run have been constructed at the expense of the national treasury and are maintained partly from this source and partly from local taxes. The greater portion of the Road Fund, which is made up from motor licenses, is devoted to highway costs. The contribution to the cost of the highways from the fund last year was, however, less than £20,000,000 ($97,400,000) out of a total of roughly £50,000,000 ($243,000,000), the greater portion being provided by private car owners and the remaining £30,000,000 ($146,000,000) came out of the pockets of the taxpayers. It is thus evident that the coach companies are in a highly privileged position as regards the maintenance of their track, and this justifies the railway companies contention that the competition to which they are subjected by motor coaches, is subsidized.

The extent of this privilege was brought out in an interesting calculation by the Minister of Transport recently who said it would have to be recognized that when a vehicle occupies part of the highway it is occupying a highly expensive piece of public capital.

Highway Stations

The most important aspect of the highway question as regards coach services probably lies in the utilization by the operating companies of the highways themselves as stations, and more particularly as terminal stations, in the larger cities. It is to the credit of certain of the operating companies that they have already taken steps to provide proper terminal facilities, but the majority of the services still initiate and terminate their journeys at the pavement, while no company has provided anything in the nature of a station in a rural area. Quite apart from the financial question, the absence of proper stations may result in serious inconvenience to the public desirous of utilizing the services.

It is not suggested that the stations should be comparable in cost or maintenance with those provided by the railway companies. So far as rural areas are concerned, all that may be required is a loading platform at the side of the road, with a building comprizing a waiting room and office heated and adequately lighted. Terminal stations in the larger towns would, however, entail considerably greater expenditure. In all probability such facilities could not be provided while maintaining fares at their present level, and it is not unlikely that insistence on their provision by the licensing authorities, together with the steps to be taken by the latter to ensure that the coaches are of suitable type from the safety point of view, would result in an all-round increase in fares of such a nature as to divert the greater part of the long distance traffic back to the railways. Where, of course, the coordination of rail and road services has already been achieved, the railway station has become a traffic center instead of solely a railway station, and is utilized by passengers by both services accordingly.

The clause in the act covering the regulation of stands and stopping places is worded in general terms and gives no specific direction that such stands and stopping places should not be on the actual highway, but it is safe to assume that action is contemplated in respect of the standing space occupied in the city of London, and, although in a lesser degree, this abuse of the highways is equally in evidence at many other points throughout the country.

Hours of Operators

The next new provision in Part I of the act, to operate from February 1, 1931, limits the time for which operators of heavy vehicles may remain on duty. It will be illegal to keep these operators on duty for more than 11 hr. in the 24 or for any continuous period of more than 5½ hr. They must also be allowed ten consecutive hours for rest in any period of 24, calculated from the commencement of any work period.

Periods of operating will be reckoned as continuous unless separated by an interval of not less than half an hour, in which the operator is able to get food and rest. These limits may be exceeded for one day, provided the operator is given time the next day to pay back his debt to Nature.

Both in the caliber of the operator on the highway and the hours worked, as compared with the railway locomotive operator, the railways, although their record of safety is unapproachable by other forms of transport, have suffered severely from the competition of highway transportation. The railways are under strict regulations as to hours of duty and their employees are skilled men of long service. On the other hand, anyone has hitherto been allowed to operate a motor vehicle, and the abnormally long hours worked in some cases have been a danger to all highway users. Cases have arisen, for instance, in which truck operators, prosecuted for dangerous driving, have pleaded that they had been on duty 40 hr. without sleeping and had sometimes been compelled to stop their vehicles because they were too exhausted to continue. Such cases will be impossible under the new law, and the unfair competition with the railways, to which it has contributed, will be largely curtailed.

In Part I of the act are also regulations as to the power of highway and bridge authorities, prohibited bridges, the weighing of motor vehicles and trailers if

demanded, etc. Toll roads and bridges are almost universally unpopular, and a valuable clause in this part of the act confers upon local authorities important powers for their compulsory requisition and conversion into public property.

Compulsory Insurance

Part II of the act, which also comes into force on January 1, enforces compulsory third party insurance, and provides that the insured person must produce his certificate of insurance or security, within five days, at the request of the police. On applying for a license for a motor vehicle, the owner will be required to satisfy the licensing authority that on the date when the license comes into operation there will be in force the necessary policy of insurance.

Hospitals may claim, from the insurer, payment for treatment afforded to the injured third party. This is limited to cover reasonable expense, up to the sum of £25 ($121) for each person treated.

Compulsory insurance will substantially end the scandal of damages not being forthcoming in the case of death or injury caused by negligent operation.

Highway Code

A very important factor for safety will be the highway code, which is to be drawn up by the Minister of Transport for submission to Parliament after consultation with police and local authorities, the organizations representing highway traffic, the trades unions and the pedestrians. It will not be a criminal offense to violate the highway code, but the observance or non-observance of its provisions can be pleaded in the courts by either party to any action. In the opinion of the minister, safety on the highways is largely a matter of educating everybody, whether operator or pedestrian, to a higher standard of conduct. In the long run, the development of a social conscience among all users of the highway will be more effective than penalties.

The day of the sovereignty of the pedestrian on the highway is over, but the new code will recognize his claims. Indeed the whole demand for public supervision of motor traffic began with the pedestrians outcry against "roadhogs." The difficulty in helping him to safety is often that he will not help himself.

Part III of the act, which provides for the preparation of the highway code is, like the whole of this great measure, no more than a framework. Broadly speaking, the act lays down the matters on which the Minister of Transport is to issue regulations. The code itself, on whose observance the whole act really depends, is not drawn up even in framework.

The highway code will be in the form of an official handbook for motorists, laying down the accepted rules of the road, and setting forth clearly a standardized system of signals for general observance. There is also to be a general revision of sign posts all through the country, a very necessary reform.

Public Service Vehicles

The parts of the act which are of the greatest economic significance are Parts IV and V which deal with public service vehicles. Many will regard Part IV as a revolution which will mark a new epoch in the history of British highways. As the law stood, it was only the boroughs, the urban districts and a few rural districts that were licensing authorities for public vehicles. Over whole tracts of the rural counties there was no licensing authority at all, and yet there were 1,300 licensing authorities in existence. For the first time, every public service vehicle has to have not only a license to run and a certificate of fitness, but also a road service license, regulating where and how it can run. The Minister of Transport believes that cut-throat competition will gradually be eliminated. "Competition," he says, "means that capital is wasted; the public often travels in uncomfortable and unsafe vehicles or pays needlessly high fares, and many transport workers have had to pay in bad working conditions for the wastage involved in competition. The undertaking which can give the best service or the small company which is efficient and will cooperate with others in providing a good service, will tend to come to the top under the new order of things.

"Comfortable, safe and efficient vehicles will be encouraged, and a readiness to cater for necessary, but possibly unremunerative, routes as well as catering for the cream of the traffic, will be a virtue in the eye of the Traffic Commissioners.

"Because something in the nature of a regulated monopoly was established, and because of the importance from the point of view of good service to the public, of safety and fair competition between one operator and another, no less than in the interests of the men concerned, a statutory condition attaches to each license that the workers should have wages and conditions not less favorable than those obtaining on government contracts under the Fair Wages Resolution of the House of Commons."

Traffic Commissioners

Under this part of the act, the country is divided into manageable areas, each controlled in the matter of motor coach licenses by its own commissioners, acting under the authority of the Minister. England and Wales are divided into eleven areas and Scotland into two. The metropolitan area is to be in the charge of three commissioners. The commissioners will, after March 1, be empowered to issue public service licenses and also road service licenses.

A whole new series of regulations is to be applied to public service vehicles, which are divided into three classes, the motor coach, carrying passengers for fares of not less than a shilling (24 cents); the express coach, namely vehicles carrying passengers to a single destination and not making regular stops; and contract vehicles, which carry eight or more passengers for an agreed price for the vehicle as a whole.

The power of the commissioners is to be very extensive. They are to be the judges of the suitability of the route over which it is proposed to run a service, and of whether a route is already adequately served or not; they are to see that the fares charged are not unreasonable and that they are so fixed as to prevent wasteful competition with alternative forms of transport, including transport by railway; and generally they are to regulate the public passenger services for the safety and convenience of the public. They may also specifically secure the provision of unremunerative services by threatening to withhold licenses for other services, and, in fact, may make the granting of licenses subject to such relevant conditions as they please, and may from time to time vary such conditions in any way they consider desirable. They are further empowered to compel passenger vehicle operators to make whatever financial and statistical returns are required by the Minister of Transport.

The importance of the provisions named above is not hard to realize. For whereas motor coach services since the war have developed under conditions of keen competition, both in the matter of speeds and fares, the

commissioners are unlikely to allow such conditions to continue. Even when some small company proved that an existing service was inadequate, the commissioners would hardly allow him to enter the field without giving the existing company an opportunity to fill the gap if it were willing to do so. Rather than allow such intrusion the larger companies are almost certain to comply with the commissioners' requirements in the matter.

Public Control

To safeguard the public interests, the commissioners are to hold public hearings for the purpose of deciding upon applications for the granting of licenses, and these hearings will also afford the public an opportunity of making complaints as to the adequacy of existing services. Thus, in place of competition there is machinery designed to safeguard the users against exploitation. The act reflects the general trend toward the public control of industry, and the use of that public control to coordinate and rationalize the services concerned.

According to the Royal Commission on Transport, the commissioners are recommended to work steadily toward the establishment of "controlled monopolies" of transport in each area.

The railways are endeavoring to establish the position of the motor coach companies they have an interest in, as centers around which the "controlled monopolies" of highway transport are to be built up, and to this end are acquiring, or obtaining a holding in, the larger motor coach companies. Out of some 40,000 public passenger vehicles, 15,000 are said to be owned by companies in which the railways have an interest, a further 5,000 are on the streets of London, and over 4,000 are owned by municipalities. The remainder consist of an unknown but not very considerable number of small motor coaches, some 4,000 long-distance motor coaches not owned by railway-controlled companies, and the independent local motor coach companies.

Railway Policy

The railway policy has been, first to acquire an interest in the principal company operating in each district; next to buy up smaller companies in the district wherever possible, and finally to reorganize the larger company, merging with it the smaller companies and, in cases where no interest was held before, arranging for a proportion of the shares in the new company to be taken up either by the Tilling and British Automobile Traction holding company or by the National Omnibus Company, the two highway transport concerns with which the railways have maintained the closest relations ever since they obtained their highway transport powers in 1928.

Motor Freight Transport

The highway traffic act will not bring into force any scheme for the reorganization of freight transport by highway, a subject which had not been dealt with by the Royal Commission on Transport at the time the bill was drafted. The commission's final report is expected in the near future and will, it is understood, include a recommendation for the regulation of haulage contractors of all degrees of importance, whether fairly large firms or owner-operators working single handed, or as a family concern. Parliament is urged to bring such services under the same control as public service vehicles with power to the area traffic commissioners to supervise routes and inspect vehicles. Further, the report will stress the point that the existing means of communication by rail and inland waterways are capable of carrying a largely increased traffic, and should be taken into account when all new highway schemes are suggested.

The progress of the railways in operating and controlling freight vehicles has not been so extensive as with passenger vehicles, although they have accomplished more in this direction than is commonly realized. Highway haulage firms, who own altogether some 60,000 motor trucks and 92,000 horse-drawn vehicles, rarely operate over regular routes like motor coaches and there is no guarantee, if one firm is bought out, against the appearance in the field of any number of others. There seems good reason for expecting this state of affairs to end in the near future. This may lead to the control of the haulage industry by the railways, apart from private cars and freight vehicles used by firms for their own transport work.

Municipal Public Service Vehicles

Part V of the act, which operates from April 1, 1931, greatly simplifies the procedure by which municipal authorities may obtain powers to operate both within and outside their own boundaries, and marks a definite step forward in extending the field of municipal activity. A local authority which has already obtained powers to operate a motor coach undertaking will be empowered not only to operate over any route within its area, but, with the consent of the traffic commissioners, over routes outside its boundaries. Before the commissioners the municipal authority stands an equal chance with a private company of obtaining a license, and the very costly procedure of promoting a bill in Parliament is obviated. Moreover, each municipality will be able to make through-running arrangements and working agreements with its municipal neighbors and suitably to cooperate with private undertakings. It seems as though the ultimate organization of passenger transport will be a small number of highway monopolies, controlled in detail by the Ministry of Transport and owned jointly by the railways, the municipalities and the Tilling and British Automobile Traction Company.

Railways Benefited

The railway companies will undoubtedly gain by the new act. They stand to gain in their competition with road transport, from the limitations on the hours of work of road transport employees, since both railway workers and railway motor transport workers have shorter hours and better working conditions than many non-railway road transport workers at the present time. This would be a leveling up of conditions to the railway standard and will make competition fairer between rail and road. License regulations will strengthen considerably the position of voluntary coordination of highway and rail interests since such agreements will, in effect, be protected from outside competition. The railways will obtain some protection from undue highway competition in so far as the instructions regarding competition with alternative forms of transport are carried into effect.

The traffic commissioners will now decide what motor coach services shall run and what routes they shall take. The plan operates in favor of the large company, which means, in fact, the railway-controlled company, for it is obviously easier for the commissioners to come to an arrangement with one large concern operating fifty services, than with a multitude of small enterprises, each with its own route. In this respect, the act makes for monopoly, but for monopoly under real public control.

Neither the municipalities nor the representatives of

private enterprise were quite satisfied with all the provisions of the measure. The act is a typical British measure of compromise, but will be judged, as everything must be judged, by the results which come from its application. The condition of highway transport in recent years has been so chaotic that it seemed no degree of order could ever be evolved from it. The firm and skillful handling of the bill by the Minister of Transport has however achieved the seemingly impossible. The highway traffic act has been framed on broad lines with a view to the general welfare. Both public and private enterprise are now subject to the same law, and the financial responsibility which will ever be upon the owners and operators of mechanically propelled vehicles will insure greater consideration and greater care being exercised and thus improve the conditions of highway travel.

Motor Transport Hearings Begin

(Continued from page 1398)

land, and that this is only a partial list. He estimated that 5,000 motor trucks are competing with the New Haven, these having a capacity of 25,000 tons. He said that truck lines which originally handled only package freight are now securing substantial tonnage in liquid and bulk commodities. Truck operators, he said, observe no rate relationship between commodities and communities.

This ended the railway testimony at the Boston hearing. Following the railway witnesses, a number of independent motor truck operators headed by Day Baker, manager of the Motor Truck Club of Massachusetts, took the stand to testify regarding their service and the taxes which they pay. Statistics were cited to prove that motor vehicles are adequately taxed. The claim was made that railway trucking is ruining independent trucking, and it was also contended that regulation of the truck lines is unnecessary.

The hearing at New York began on December 18. A report of the proceedings is published in Section 1 of this issue of the *Railway Age*.

N. E. T. Awards Safety Insignia

(Continued from page 1403)

highway than is the operator who persists in clinging to his own ideas. The mere manual act of handling a coach, such as any operator would demonstrate in actual test with an inspector, is no indication of the judgment which he possesses when left alone and upon his own resources on the highway. This is one of the main reasons why companies must continue to train men to the end that safe, prompt and dependable service may be rendered to the public.

During the three summer months, or from the Fourth of July to Labor Day, peak business conditions do not permit the giving of time on the part of either officers or employees to periodical safety meetings, but these meetings are held with regularity during the remainder of the year. Both officers and employees participate in the meetings.

By the attendance record we are able to note those who, for reasons of their own, elect not to be present and to such men, when they become involved in accidents, we do not feel so considerate, for the reason that they have not evidenced interest in their own welfare in a manner which we consider necessary.

Of the total number of motor coach operators in our service, approximately two-thirds have, during their course of employment, been awarded at least one of the no-accident insignia. It is a matter of record that on November 20, 1930, three employees who had then been in the service five years, were awarded the gold star with a diamond center, the button being of solid gold with a small diamond insert. The reaction to this we have yet to learn, but I do know that there is noticeable a greatly increased interest now that the men have seen the fulfillment of the company's promise. The reaction has been entirely different from that which would have followed a financial bonus award.

Motor coach transportation is still in its infancy and it affords a wonderful field for safety activities. It also represents a field that will be prolific of accidents if these activities are not followed up in a constructive and humanitarian way.

Maintaining the Largest Fleet of Motor Coaches

(Continued from page 1400)

each coach every 1,000 miles, which is approximately the mileage covered in one week. At this inspection, the coach is thoroughly greased and the engine oil is changed. Necessary adjustments are made and a road test given to determine the performance of the coach. Gas-electric equipment is tested for engine performance on a water barrel, which is directly connected to the generator and acts as a rheostat. This permits determining the performance of the engine without moving the coach.

The larger garages are equipped with brake testing machines which measure the braking effort of each wheel of the coach. The wheel is turned against the brake resistance by an electric motor, and the resulting effort is read on a meter in terms of pounds of road pull.

Other labor saving equipment is installed at most of the garages, including high pressure grease guns, electric gasoline pumps and power washing machines.

Wreckers—Necessary or Unnecessary

(Continued from page 1408)

heavy-duty lifting crane and a snow plow attachment. The platform-type body is 13 ft. 6 in. long and 5 ft. wide, and is built around the overhead crane structure. The body has toolboxes, lockers, drawers and a removable roller at the rear.

A special towing bar prevents the coach from swaying when it is lifted off the ground, allowing the wrecker to do all pulling and braking without danger of damage to the fenders or headlights. A five-ton winch has "niggerheads" which pull in either direction, and a one-ton chain hoist runs the entire length of the body.

The supplies and tools carried include a complete acetylene cutting and burning outfit, extra gasoline and oil, ropes, jacks, chains, cables, wood blocks, picks and shovels, a complete set of mechanics' tools and a first-aid kit. A 45-cp, swivel-type spotlight is mounted on the front end of the crane.

New Equipment

White Builds 16-Passenger Highway Coach

THE White Company, Cleveland, Ohio, has designed and built two new six-cylinder motor coaches, one a 16-21 passenger pay-enter type for city work and the other a 16-passenger highway coach for intercity operation. These coach bodies are

Interior Arrangement of 16-Passenger Coach

mounted on the new model 613 chassis which is said to be economical to operate and to have great flexibility in traffic.

Both the pay-enter and the highway-coach type bodies are manufactured by the Bender Body Company, Cleveland, Ohio, and have lines and appointments similar to those of the larger White motor coaches.

The intercity coach has fully upholstered, parlor-car-type seats, of light weight construction. The seating arrangement provides for single seats on the right side of the aisle, facing forward, and double seats on the left side of the aisle. The seats are liberally spaced and have concave headrests and hat clips on the back.

Interior luggage racks are provided, and excess baggage can be carried on the rear section of the roof. A small dome light, mounted under the baggage rack is located over each seat. For general lighting, four large dome fixtures are mounted in the roof.

The upper part of the windows is trimmed with a valance which extends down on each window post to the bottom of the metal framed mirrors. A hot-water heater is furnished and a supply of fresh air is obtained by four roof ventilators.

The general dimensions of the highway coach are as follows: Length over all, including bumpers, 24 ft. 8 in.; dash to end of body, 18 ft. 7 in.; center of rear axle to end of body, 72⅝ in.; outside width, 78 in.; headroom in front, 72 in.; headroom over rear axle, 68 in.; seat centers, 33 to 37 in. The net weight of the chassis and body, ready for the road, is approximately 9,800 lb.

The pay-enter body has an interior width of 84 in. and is fitted with double seats, 34 in. wide, giving an aisle space of 16 in. The headroom of 76 in. is made possible without undue overall height, by a double-drop-frame feature.

The 4-A engine used in the model 613 chassis is of the six-cylinder, L-head type, having a bore of 3¾ in. and stroke of 4½ in. The crankshaft is mounted in seven

White 16-Passenger Intercity-Type Coach

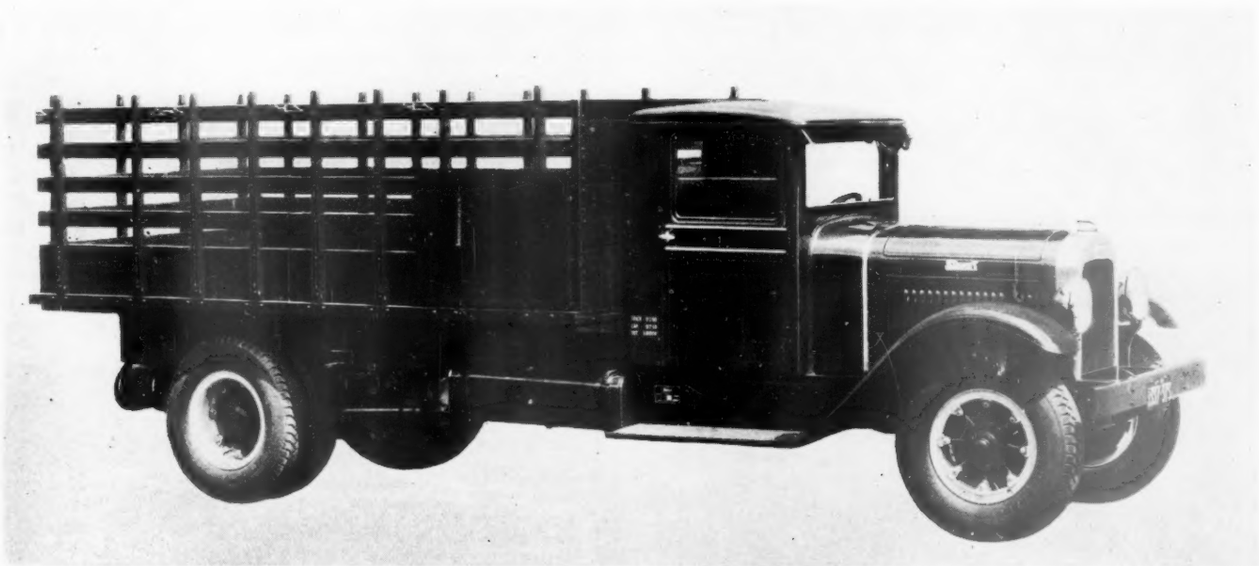
main bearings and the detachable cylinder head has machined combustion chambers. The engine develops a torque of 175 ft. lb. at 1,000 r.p.m.. Full pressure lubrication is supplied to all main, connecting rod, camshaft, piston pin, accessory drive and chain idler bearings.

The single-plate clutch operates in oil. The semi-floating rear axle is a one-piece casting and has a single gear reduction. The four wheel brakes are of the internal expanding type with moulded linings and are operated hydraulically with a vacuum booster. Standard tire equipment consists of 7.50 in. by 20 in. balloon tires, single on front and dual on rear.

Stewart Announces New Three-Ton Motor Truck

THE Stewart Motor Corporation, Buffalo, New York, has recently added a three-ton chassis to their line of motor trucks. The model 35-X is equipped with a six-cylinder engine, four-wheel brakes, a frame 9 in. deep, and a full floating spiral-bevel-type rear axle.

The truck-type six-cylinder engine has a bore of 3¾ in. and a stroke of 4½ in. giving a displacement of 298 cu. in. Grey-iron pistons are used. The crankshaft bearings are 2⅝ in. in diameter. The crankshaft and camshaft bearings are lubricated under pressure through drilled passages.



Stewart Model 35-X Three-Ton Truck

The large multiple-disc, dry-plate, ventilated-drum-type clutch has 13 plates. Both the clutch throw-out and the clutch pilot bearings are enclosed and positively lubricated.

The transmission has four forward speeds. The shafts are extra large and are supported by annular ball bearings. When using a worm or double reduction rear axle, it is possible to substitute a 12-speed auxiliary transmission, which is available at extra cost.

The front axle king-pins are mounted on Timken roller thrust bearings to reduce steering friction. The axle, which has a tread of 64 in., is designed for balloon tires.

The rear axle is heavily constructed. The housing is made of cast steel, the outer ends being reinforced with alloy steel sleeves which support the wheel bearings. The axle shafts are $1\frac{5}{16}$ in. in diameter with the ends enlarged where the splines are cut. The standard gear ratio is 7⅛ to 1, with a special ratio of 6⅜ to 1 available at extra cost.

The four-wheel Duo-Servo, internal-expanding service brakes have front drums 2 in. wide and 16 in. in diameter, and rear drums, 3 in. wide and 17¼ in. in diameter. The hand brake, mounted on the rear of the transmission, has a diameter of 9 in. and a width of 5 in.

The front springs are 40 in. long and 3 in. wide, having 11 leaves. The rear springs are 56 in. long and 3 in. wide. Six-leaf helper springs, which are standard equipment, give added capacity to the 15-leaf main springs. The frame is made of steel 9/32 in. in thickness, and is 9 in. deep at the point of greatest stress. Tubular drive shafts are used which, on the long wheelbase chassis, are supported on self-aligning ball bearings.

The tires furnished on this model are 8.25 in. by 20 in. balloons, with an option of 34 in. by 7 in. high pressure pneumatics on the rear. The gasoline tank, located on the side of the frame, has a capacity of 30 gal. The standard wheelbase is 165 in. The weight of the chassis is 5,800 lb.

Hercules Heavy Duty Six-Cylinder Engines

AN additional line of heavy duty six-cylinder engines of the L-head type, is now offered by the Hercules Motors Corp., Canton, Ohio. The torque ability of the new series HX engines range from 410 ft. lb. in the model HXA, to 610 ft. lb. in the model HXE. This torque is said to be practically constant at from 800 to 1,200 r.p.m., making these engines especially applicable for truck and motor coach service. Special

features of the design include a down-draft manifold, double-scavenging oil pump, large capacity water pump and properly cooled valves and valve stems. All engines in the series are identical in design and alike as to installation measurements. They differ only in the bore of the cylinders and such parts as are thereby affected, the stroke being 6 in. on all models. The displacement of the five models is as follows: Model HXA, bore 4¾ in., displacement 638 cu. in.; model HXB, bore 5 in., displacement 707 cu. in.; model HXC, bore 5¼ in., displacement 770 cu. in.; model HXD, bore 5½ in., displacement 885 cu. in.; and model HXE, bore 5¾ in., displacement 935 cu. in.

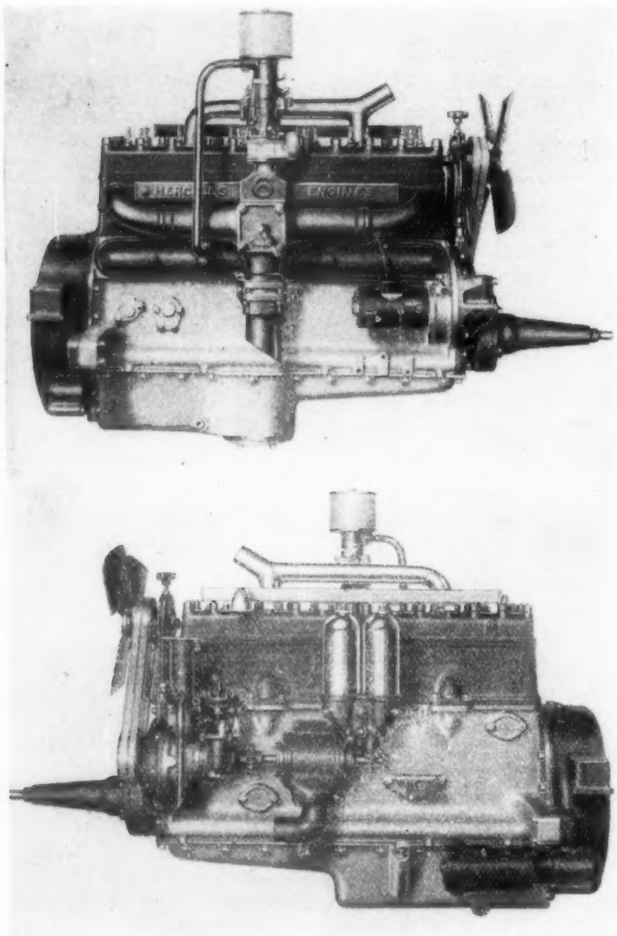
The crankcase is built to provide unusual rigidity and is cast separately from the cylinders. It is supplied in either aluminum or grey iron, depending upon the service for which the engine is intended. The crankshaft is supported on seven main bearings, all of which are 3½ in. in diameter. The projected bearing area of the seven main bearings is 58 3/16 sq. in.

The connecting rods are of a unique design, wherein the bolts which secure the bearing caps to the rod, are forged integrally with the rod. This feature provides additional strength since the rod is not weakened by the usual drilling and milling for the bolt and head.

The cylinders are cast in pairs of three. The heads are removable and designed to accomodate two sets of spark plugs, where double ignition is desired. An oil purifier and an air cleaner are provided. The water pump is of large capacity, delivering 135 gal. per min. at 2,000 r.p.m., and the six-blade fan is driven by double V-belts.

A down-draft inlet manifold has been developed for the engines, but an up-draft manifold is also available. Exhaust manifolds of the center or rear outlet type are likewise supplied. Battery and magneto ignition units and an air compressor can be mounted.

The camshaft is supported on eight bearings, all having a diameter of 2⅜ in. The cam contour is designed to give quiet operation.



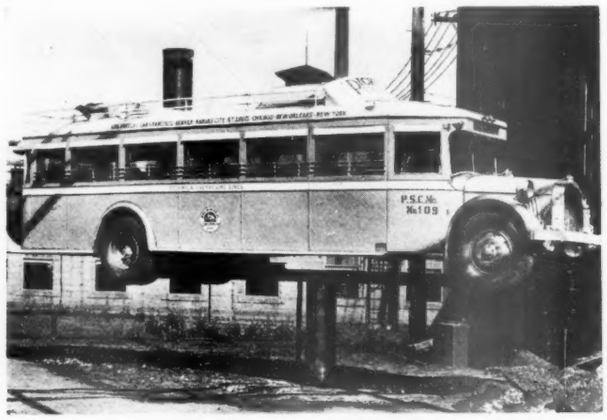
Hercules, HX Series, Truck and Motor Coach Engines

Curtis Pneumatic Lift For Long Wheelbase Coaches

THE Curtis Pneumatic Machinery Co., St. Louis, Mo., has announced a truck and motor coach lift which has a capacity of 10 tons and a platform length of 23 ft. The lift is designed to handle the largest trucks or single-deck motor coaches now in regular production.

The vehicle is lifted by the front and rear axles, leaving the wheels free for easy brake and wheel adjustments and for the quick removal of tires. The lift is of the single post type and can be rotated a full 360 degrees to permit the vehicle to be driven forward both going on and off.

Several safety features are built into the lift. The welded platform is made of H-section steel beams, capable of sustaining five times the rated capacity of the lift. The cylinder is both lifted and locked by incompressible oil and cannot be lowered without two deliberate actions on the part of the operator. Both the air operated valve and the oil lock valve must be opened before lowering can start, and they are located in a position which involves no danger to the operator.



The Curtis Lift, for Long-Wheelbase Trucks or Motor Coaches, Has a Safety Leg

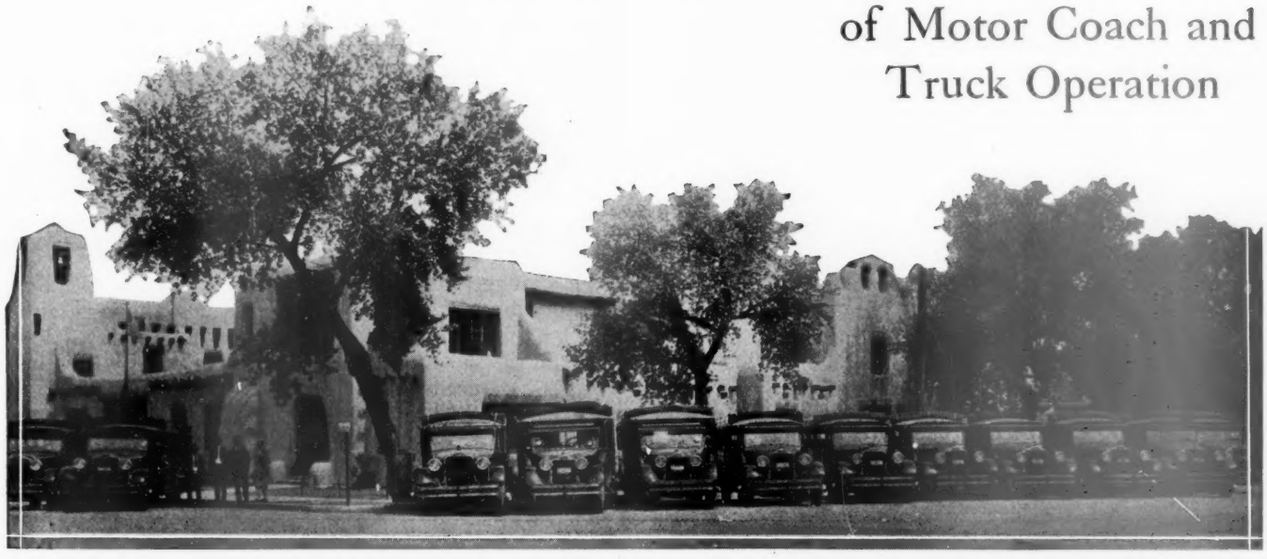
A safety leg, to be placed in position after the lift has been raised, is furnished without extra cost. It is said that a factor of safety of 400 per cent is provided in all parts.

The principal advantage claimed for the lift over the bi-level pit is the reduction of the fire and accident hazard, many cities prohibiting the use of pits except under special conditions.

The lift can also be furnished with a roll-on type of platform, made to order to suit the vehicles in each particular fleet.

Every-Day Problems

of Motor Coach and Truck Operation



This Month's New Questions

Question No. 38

Who Loads and Unloads Freight?

"Where contract truckmen are employed to truck freight either in transfer service or line service, do railroad employees or employees of the contractor load and unload the freight? If employees of the railroad load and unload the freight and employees of the contractor have no opportunity to check the freight, as in closed trailers, what stand is taken on damage claims?"

Question No. 39

Getting the Short-Haul Passenger

"Is it your observation that fewer short-haul passengers are riding in motor coaches, aside from a normal seasonal decline in this traffic? In your opinion, will short-haul passengers leave the motor coach for the private automobile, as they have left the train? What means are you using to hold your short-haul traffic? What have been the results of these efforts?"

What Is Your Answer?

Reply to Question No. 36

Taxation and Regulation

"On the average, what is the amount of taxes and fees paid annually on your motor coaches? Upon what basis are these charges assessed? What are the statutory limitations of motor vehicle dimensions and weights in states where you operate? How generally are these restrictions observed by operators? What proportion of your operating expenses are represented by taxes and fees? What is the trend with respect to motor vehicle taxation and regulation in your territory?"

Taxes Represent 10 per cent of Operating Costs

The amount paid for taxes and fees annually by the West Virginia Transportation Company on its motor coaches represents an average of 2.104 cents per coach mile. This includes the 4 cents per gallon tax on gasoline used, the fee of one-fifteenth of a cent per seat-mile capacity of coaches, and the property tax.

The motor vehicle laws of West Virginia specify that there shall not be operated on any road or highway in the state any vehicle whose width, including load, is greater than 90 in. (except traction engines, farming implements and other vehicles used by farmers when hauling hay, etc.), or which has a greater height than 12 ft., or a greater length than 40 ft. in a single vehicle; and no combination of vehicles coupled together may

have a length greater than 60 ft. Also prohibited are a gross weight (single vehicle) of more than 20,000 lb., or a greater weight than 17,000 lb. on any one axle, or a greater weight than 9,000 lb. on any one wheel, or a weight on any one wheel of more than 600 lb. per inch width of tire in actual contact with the road surface. In special cases and under certain conditions, vehicles exceeding these limitations may be operated for a single trip or a definite period under special permits granted at the discretion of the state road commission. These restrictions are observed by the responsible local operators, but are to some extent disregarded by others, either through ignorance of the law or willingness to take a chance on not being detected by the supervising state authorities.

With respect to the taxes and fees that we pay, the amount represents approximately ten per cent of our total operating expenses, including interest, depreciation, taxes, insurance, etc.

It is our view that the trend is stationary with respect to motor vehicle taxation and regulation in our territory.

M. F. Steinberger,
Manager Highway Transportation, Baltimore & Ohio

Replies to Question No. 37

Crankcase Oil

"How often do you find it necessary to change the oil in the crankcases of your motor vehicles? Does the age and mechanical condition of the vehicle determine the mileage between drainage, or do you change the oil in every vehicle, after a fixed mileage? Do you reclaim used oil, and what is the cost of the reclaimed oil? Is the record of oil consumption of a vehicle used as a factor in determining whether the engine is in need of overhauling?"

Trying to Eliminate Changing of Crankcase Oil

Due to the fact that we have equipped our motor coaches with Purolators, we have extended our draining periods to 4,000 miles. In this connection, we are now conducting an experiment to try and eliminate the changing of crankcase oil.

The mechanical condition of the vehicle heretofore has been a factor in determining the frequency of crankcase draining. We have found that by changing piston rings when our oil averages drop, we have been enabled to eliminate draining on account of mechanical condition.

We reclaim all engine oil, the approximate cost of reclaiming being 18 cents per gallon. The record of oil consumption per vehicle is used as a determining factor in the replacement of piston rings and pistons.

H. P. McDonald,
Superintendent of Automotive Equipment, Missouri Pacific Transportation Co.

Oil Changed on a Fixed Schedule

We change our crankcase oil on a regular scheduled mileage, namely, every 2,000 mi. The age and mechanical condition of the coach does not enter into the schedule as the oil is drained in every vehicle after the fixed mileage has been covered. We do not reclaim our used crankcase oil.

We keep a record of the quantity of oil consumed by each vehicle, and to a certain extent this is a factor in determining whether the engine is in need of overhauling. Certain routes, however, use lower transmission speeds than others, which increases engine speeds and consequently lowers the oil mileage. As our coaches do not always operate over the same routes it is hard to determine the mechanical condition of the engine entirely on the basis of oil consumption.

R. C. Boyden,
Mechanical Superintendent, Boston & Maine Transportation Co.

Schedule Depends Upon Make of Coach

We change our crankcase oil on a prearranged mileage basis. The schedule for motor coaches equipped with one type of engine calls for a change of oil every 2,500 mi. while in the case of another make of coaches the period is reduced to 2,000 mi. In motor trucks, we change the oil every 2,000 mi. With either type of vehicle, the mechanical condition of the engine is not usually a factor in the determination of the oil change period.

We reclaim some of our crankcase oil, but due to the remoteness of certain concentration points, we have found it inadvisable to carry out this program to any great extent.

Engine overhaul periods are based upon a prearranged mileage. The oil consumption, at any time during the life of the engine, would be an indication of the necessity of renewal of the piston rings, and would also aid in arriving at a conclusion as to the extent of repair work necessary in advance of the prearranged overhaul mileage.

H. M. Walker,
General Superintendent, New England Transportation Co.

Reclaimed Oil Cost 7 Cents a Gallon

Immediately after an engine has been overhauled, the oil is drained every five hundred miles for the first thousand miles. It is then drained every one thousand miles. The age and mechanical condition of the vehicle does not determine the mileage between drainings, in as much as we believe it would be impossible to have our various line shops keep track of when to drain oil.

We do reclaim used oil at an approximate cost of 7 cents per gallon, and find that the product received from the oil reclaimer is entirely satisfactory.

The record of oil consumption of a vehicle is used as a predominant factor in determining whether the engine is in need of overhauling.

Warren A. Taussig,
General Superintendent, Southwestern Transportation Company

THE KANSAS CITY PUBLIC SERVICE COMMISSION plans to present to the next legislature of that state a program of revised regulatory laws designed to control motor vehicle operations. The proposals will be based on results of a recent study of the question which has been completed by the commission.

"The two outstanding features of the legislation concern the amount of money the trucks and buses should pay for the use of the roads and the size and weight of the trucks," says a recent dispatch from Topeka, Kan., to the Kansas City Star. "The commission" the dispatch continues, "has not yet definitely determined just what fees it will request nor what size and weight limits it will seek to impose upon the vehicles."

Motor Transport NEWS

Manufacturers To Discuss Legislation and Taxation

Legislation and taxation problems affecting the operation of commercial motor vehicles throughout the country will be discussed at a meeting of truck manufacturers to be held January 6, 1931, at the headquarters of the National Automobile Chamber of Commerce, New York City. Among the subjects to be considered will be the restrictive measures on motor truck operation which are expected to present themselves with the opening of the legislatures of 44 states.

Another matter scheduled for consideration, according to the announcement of the meeting made public on December 10, is: "Railroad opposition to motor vehicles."

Freight Trucking Service Established in Brooklyn

B. M. T. subsidiary installs new store-door plan—No action in Manhattan

The South Brooklyn Railway Company, a subsidiary of the Brooklyn-Manhattan Transit Corporation, as reported in the *Railway Age* of December 6, page 1241, has inaugurated a store-door freight service by motor truck in the borough of Brooklyn, New York City, under tariffs which became effective November 27. The service which is restricted to carload freight is available in all parts of Brooklyn and is designed to co-ordinate with the rail service of carriers and contract terminals.

Firms using the service provide space on their premises for trailers. For outbound shipments, trailers are placed at the shipper's plant at the time specified by him. When freight is loaded on the trailers by the shippers, railroad responsibility starts. Similarly, on inbound shipments, railroad responsibility continues up to the time of delivery of the freight on trailers at the consignee's premises, where the consignee unloads. The transfer of freight between the trailers and railroad cars is performed by the carrier and the cost thereof absorbed in the freight rates.

The South Brooklyn Railway has been

(Continued on page 1424)

Interstate Regulation Bill Recommitted by the Senate

Action, following three days of debate on measure, is regarded as removing probability of passage at present session of Congress

After three days of debate in the Senate the bill for the regulation of interstate motor coach transportation was recommitted to the committee on interstate commerce by a vote of 51 to 29, on a motion introduced by Senator Smith of South Carolina. He contended the bill should be sent back to the committee for revision in the light of the controversies developed in the debate and this action is regarded as removing any probability of action on the bill at this session of Congress. It is understood that the committee plans to hold public hearings on the bill.

The bill in its present from was not satisfactory to the principal advocates of regulation, and on the other hand was bitterly opposed by Senators who objected to the idea of restricting motor coach operation by regulation. One of the objections of the railroads was removed, however, by the adoption of an amendment proposed by Senator Glenn, of Illinois providing that nothing in the bill shall be construed "to prevent railroad corporations from organizing or operating motor carriers where no consolidation, merger, or acquisition of control of motor carriers is involved in such organization or operation." Senator Glenn said he feared that the provision already in the bill would prevent railroad operation of motor coach lines. Senator Couzens of Michigan, chairman of the committee on interstate commerce, assented to the amendment, on the ground that the object of the bill was to prevent the railroads from buying existing bus lines, but not to prevent them from starting lines of their own.

In the debate on the measure at the previous session of Congress last year, Senator Glenn proposed an amendment which would strike out the provision designed to prohibit any acquisition of control of a motor coach line by railroad. This amendment was defeated by a vote of 21 to 27 (see *Motor Transport Section* of July 26, page 215).

Commenting upon the action of the Senate in sending the bill back to his committee Senator Couzens, who opposed the recommittal, said in part:

"I believe that this agitation has been begun by the railroads. Since this session of the congress convened the railroads have been lobbying to have the bill killed. Just as soon as the Senate disagreed to the Glenn amendment, which was to the effect that railroads might

(Continued on page 1425)

Railway Express Agency Leases New Garage at St. Louis, Mo.

The Railway Express Agency has taken a 15-year lease on a garage building to be constructed by the J..W. Kopman Construction Company, St. Louis, Mo., in the half block bounded by Spruce, Sixteenth and Fifteenth streets at St. Louis. The structure, which will be constructed of brick and concrete with outside dimensions of 150 ft. 332 ft., will involve an expenditure of about $150,000. The Railway Express Agency has disposed of its present garage and stable building at Twenty-Second and Eugenia streets in the same city.

Connecticut Regulations Apply to Interstate Motor Coaches

Speed regulations and other traffic rules applied to intrastate motor coaches certificated by Connecticut will henceforth be enforced in connection with vehicles operating on interstate routes through that State, according to a recent statement of Robbins B. Stoeckel, commissioner of motor vehicles. Intrastate motor coaches are required not to exceed 35 miles, Mr. Stoeckel said, but this same limitation has not been applied to other vehicles operating over routes upon which certificates from the commission are not required.

State Denied Authority Over Interstate Route

U. S. Court dissolves injunction granted by state court to stay operation

The Federal District Court of South Carolina in a recent order denied the right of the Railroad Commission of South Carolina to prohibit a motor coach company from providing interstate service through that State. The case, entitled Sam C. Blease et al., constituting the Railroad Commission of South Carolina vs. Safety Transit Company came before the Federal court upon its transfer by the respondent from the South Carolina Supreme Court where an injunction sustaining the commission had been issued.

The Safety Transit Company, according to the Federal court opinion's recital of the facts, applied to the commission for a certificate to operate through South Carolina. The certificate was denied and the respondent thereupon undertook to do an exclusively interstate business. The railroad commission in an action brought in the state court obtained a preliminary injunction enjoining the Safety Transit Company from operating any motor vehicles for hire in and through the State of South Carolina.

Following the summation of the facts the court rejected the contention of the railroad commission, that jurisdiction in the premises remains with the State court holding that, "It appears upon the face of the petition that the respondent claimed the right to operate its buses through South Carolina, and that this right was sought to be enjoined. Clearly, this right arises under the Constitution and laws of the United States. It is settled that where a State brings suit in one of its own courts it may be removed to the Federal court, if it is a suit arising under the constitution or laws of the United States."

The concluding remarks of the court's order, as reported in a recent issue of the United States Daily, are as follows:

"Upon the merits of the case, little need be said. The respondent has not attempted to do anything but an exclusively interstate business. It is ready, willing and able to pay all taxes due, and to comply with all the police requirements of the State. It does not claim the right to do any intrastate business except with the consent and permission of the railroad commission. The railroad commission claims that under the Acts of the General Assembly of South Carolina * * * the railroad commission is vested with the discretion to deny the respondent the use of the highways even though the respondent is engaged exclusively in interstate commerce. But the decisions are clear that this is beyond their power * * *

"So far as the petition seeks to enjoin the respondent from doing a purely interstate business, the prayer for an injunction must be denied, and the petition dismissed.

"As to the intrastate business the petitioners concede that no injunction should be granted on those routes where they have already granted the respondent a certificate of convenience and public necessity. But I do not think they are entitled to an injunction as to any intrastate business, because there is no evidence that the respondent has done any intrastate business without the consent of the railroad commission, nor that it has threatened or attempted to do so, or that it intends to do so. A court of equity will not issue an injunction in such circumstances.

"If the respondent were endeavoring to do an intrastate business without complying with the requirements of the railroad commission, an injunction would be issued; but where they do not intend such action and are not attempting it, the injunction should be refused; but it will be without prejudice to the right of the petitioners to prevent by injunction or otherwise, as they may be advised, the respondents from doing any intrastate business without complying with the requirements of the laws of this State, if it should attempt such action.

"A final decree in accordance with these views will be duly entered."

Flares for Warning Signals Required on Kansas Vehicles

An order requiring motor coaches and trucks operating in Kansas to be equipped with colored flares so that drivers can place warning signals at each end of a standing vehicle, has been issued by Jesse W. Greenleaf, chairman of the Kansas Public Service Commission. The order also requires that lights be displayed in such a manner that drivers of other cars can readily discern the length and width of motor coaches and motor trucks in their path.

Two Executives See Railways as All-Transport Companies

J. J. Pelley, president of the New York, New Haven & Hartford, in a recent address before the New England Council at Boston, Mass., advocated the regulation of highway transport with a view to effecting its economic co-ordination with railway service. With such co-ordination, Mr. Pelley said, "The public would continue to look to the railways for its transportation, but the railways would be the centers of general transport companies, the railways moving the heavy commodities and the long haul freight, but trucks being used when they provide a service desired by the public."

This suggestion to develop the railways into all around transportation companies was also voiced by W. W. Atterbury, president of the Pennsylvania, in a recent statement to stockholders of that road. Mr. Atterbury said in part, "This company desires to see the nation and its industries enjoying the best and cheapest transportation; but, future consideration of the railroads' situation should bring such legislative and regulatory relief as will enable them to profitably engage in all kinds of transportation service—by land, water or air."

Ohio Trucking Permit Is Denied N. Y. Central

Commission refuses certificate for route formerly operated under contract

The Public Utilities Commission of Ohio has denied the application of the New York Central for a certificate of convenience and necessity to operate motor trucks for the handling of freight between Cleveland, Toledo and Danbury and intermediate points. The New York Central is expected to appeal from this decision which is the result of extended litigation over the highway freight route involved.

In 1925 the New York Central entered into a contract with the A. B. Peek Company under which the latter agreed to handle l.c.l. freight by motor truck for the railroad between Cleveland, Ohio, and Toledo and intermediate stations. In March, 1929, a complaint against the New York Central was filed with the Utilities Commission by the Ohio Association of Commercial Haulers and the hearing on this complaint was conducted on June 15, 1929.

The case involved the question of whether the New York Central under its contract with the A. B. Peek Company, was a common carrier motor transportation company, requiring from the commission a certificate for operation. The finding of the commission was that "The New York Central Railroad Company directly, or through the A. B. Peek Company, or any other agent not certified by this commission be, and hereby they and each of them are, notified, directed and required forthwith to cease and desist from maintaining and operating or attempting to maintain and operate said unlawful motor transportation company service." This decision of the commission was published in the *Motor Transport Section* of September 28, 1929, page 773.

Following the adverse findings of the commission, the New York Central appealed to the Ohio Supreme Court. This latter body upheld the commission stating that the contractual relationship between the New York Central and the A. B. Peek Company, constituted the former "a motor transportation company" subject to the Ohio law requiring a certificate of public convenience and necessity. An abstract of this decision of the Ohio Supreme Court was published in the *Motor Transport Section* of March 22, page 743.

The next step of the New York Central was to apply to the commission for a certificate to operate over the route. This application was filed shortly after the opinion of the Supreme Court was handed down and the present order of the commission denies the certificate. At the hearing in connection with the application the plea of the New York Central was opposed by the Ohio Association of Commercial Haulers and 11 companies and individual operators engaged in motor truck transportation within the territory involved.

North Western Begins Container Operations

Four types of service available under plan which became effective Dec. 3

The Chicago & North Western, on December 3, established a container shipping service between Chicago and Milwaukee, Wis., which involves both station to station and door to door delivery. L.c.l. shipments are being handled in containers which have a total cubic capacity of 417 ft. and which are handled on gondola or container cars. Four types of service are involved. Under the door to door delivery, the railway company delivers the empty container to the shipper's place of business, picks it up when loaded and delivers the loaded container to the consignee, returning the empty container. With the station to station service, the shipper may, if he elects, at a saving in rate, call for the container at the railway station and return the same loaded, and at destination the consignee may take the container from the station to his place of business and return the empty container, or the shipper may bring his goods to the railway platform and load them in the container and the consignee may unload the container at the inbound platform and take the shipment to his place of business. Under the third type, the railway delivers the empty container to the shipper and picks up the loaded container, and the consignee performs his own delivery service at the other end, either by unloading the container at the freight station or taking the container to his place of business for unloading, returning the empty container to the freight station. With the fourth type, the shipper may load his goods into the container at the railway station or may pick up the empty container at the outbound platform and return it loaded to the platform. The railway will deliver the loaded container to the consignee and pick up the empty container.

The advantages of this service, according to the railway, are the elimination of packing and classification requirements the reduction in shipping costs, the elimination of the intermediate handling of goods, the use of a bill of lading which extends from store door to store door, the insurance of prompt service, a more flexible service for the l.c.l. shipper, the reduction of the possibility of damage, the protection from inclement weather, elimination of possibilities of pilferage and practicability.

Railway Co-ordinating Plan Approved by Texas Commission

Railroads operating in Texas were recently granted permission by the Railroad Commission of that state to provide store door service at present rail rates in an endeavor to meet the competition of motor trucks. Under the order, authority was given the Texas & Pacific and the Missouri Pacific Transportation Company, to interchange traffic, with pick up and delivery service, for the customary station-to-station rail rate. Permission to make a similar interchange agreement with the Electric Express & Baggage Company on traffic moving from Dallas to points south, was also given the Missouri Pacific subsidiary.

A second order allowed the Missouri Pacific to reduce rates on cotton between Navasota and Anderson inclusive and Galveston and Houston; a similar reduction was permitted on rates from Brenham to Galveston and Houston.

Greyhound's Charter Service Popular in P. R. R. Territory

The special party motor coach service recently inaugurated by the Greyhound Lines in the Sunbury division area of the Pennsylvania is meeting with considerable favor, according to an item in a recent issue of "Pennsylvania News," official publication of the railroad. The item points out that, with the advantage of arranging itinerary and other details according to the desires of the individual party, the service is meeting the needs of the patron who wishes the convenience of a trip "in his own car without the disadvantage of personal operation."

Store-Door Services Extended to Oregon by Southern Pacific

The highway freight service performed along the Pacific coast by the Southern Pacific, through its subsidiary, the Pacific Motor Transport Company, was recently extended to Oregon under tariffs filed in that state during the latter part of November. These tariffs contemplate a complete store-door service under one rate, the charge for the co-ordinated service being comparable to those of other carriers operating in a similar manner. The haul between towns will be arranged under contract with the Southern Pacific for handling the freight by rail.

Bill To Permit Mail Carriage by Motor Coach Recommitted

The House of Representatives on December 10 voted to recommit to its committee on postoffices and post roads a bill to authorize the Postmaster General to permit railroad and electric-car companies to provide mail transportation by motor vehicle over highways in lieu of service by train, at a rate not in excess of the rate that would be allowed for similar service by railroad. It was explained that this was to take care of situations where railroads have discontinued branch line trains. Objections were made by a number of Representatives because the bill did not provide for a lower rate for motor-vehicle transportation so that the government could obtain the benefit of this "cheaper" form of transportation. It was explained that the committee had before it the express statement of Postmaster General Brown that in no case would he allow a railroad to carry mail under this provision unless it should be at a lower rate.

Utilities Commissioners Consider Competition

Highway transport regulatory proposals also discussed at Charleston

Competition of motor vehicles with railways and current proposals to regulate highway carriers were among the more important subjects discussed at the recent convention of the National Association of Railroad and Utilities Commissioners held in Charleston, S. C. The report of the committee on motor vehicle transportation, presented by its chairman, Amos Betts, a member of the Arizona Corporation Commission, held that any encroachment of motor carriers upon the long-haul field to the same extent that they have now occupied the short haul territory would be disastrous to rail carriers.

"There has been some indication that the railroads themselves might solve this problem by the acquisition of the more important existing truck lines," the report stated, "but we doubt if this can be accomplished in a satisfactory manner to the benefit of the rail lines, the motor carriers or the general public without some measure of regulation.

"Since it is no longer a debatable question as to the extent and magnitude of motor vehicle operations and since it is conceded that the necessity for the regulation of the traffic is just as great as in other lines of public service, it seems essential and desirable that the regulatory commissions be vested with adequate power and jurisdiction to effectively handle the situation, and where the laws are not now sufficiently strong to accomplish this purpose, there should be a constant drive toward that end."

Asserting that there is a place in the Nation's transportation system for the motor vehicle, but as an adjunct to rather than as a competitor of the railroads, L. R. Powell, Jr., the president of the Seaboard Air Line, expressed the opinion in an address to the commissioners that the competition of the motor carriers can be controlled in no way except through the medium of statutory regulation and taxation.

Discussing the subject of regulation of the irregular route motor carriers, Joseph H. Hays, representing the Iowa Truck Owners Association, told the commissioners that there is a place for the railroad and for the common carrier truck, but that years will be required to adjust their relations.

He continued to point out that irregular motor carriers in Iowa had voluntarily had their operations placed under the jurisdiction of the State Railroad Commission, but not to the extent of requirement of a certificate of public convenience and necessity, and the results of the first year under this method had proved highly satisfactory.

Mr. Hays said the increases of class rates by the railroads strongly tends to strengthen the position of truck operators.

Four Railway Lines Organizing Joint Pennsylvania Subsidiary

Four railroads operating in Pennsylvania, according to recent reports from Harrisburg, have applied to the Public Service Commission of that state for approval of the organization and incorporation by them of the United Transportation Company, a joint highway subsidiary. It is understood that charter rights to operate motor coaches and trucks in the Pennsylvania counties of Bucks, Carbon, Lackawanna, Lehigh, Luzerne, Monroe, Montgomery, Northampton, Philadelphia and Pike are sought and that the interested railroads are the Pennsylvania, the Central of New Jersey, the Reading and the Lehigh Valley.

Pennsylvania Subsidiary Denied Intrastate Certificate in Ohio

The Public Utility Commission of Ohio in a recent order denied the application of the Pennsylvania General Transit Company, highway subsidiary of the Pennsylvania, for a certificate to operate motor coaches in intrastate service across Ohio from Steubenville to the Indiana state line. A dissenting opinion in the case, filed by Commissioner Bricker, held that the railroad subsidiary should have received the application in order that the Pennsylvania might thereby "render service supplemental to its railroad train service and in protection to the railroad against destructive competition with such established service."

Under the majority opinion a permit to conduct intrastate operation was granted to the White Star Bus Line Co. This independent company, according to the order, was already operating an intrastate line between Steubenville and Cadiz in addition to its Pittsburgh-Indianapolis interstate line on which latter it had not been permitted to handle intrastate traffic. The new order now removes this restriction. The Pennsylvania had held an interstate certificate for the operation over route involved but had not exercised its authority thereunder and thus the order said that the railroad had made "no demonstration of service on the route."

Regulation of Highway Carriers Recommended for New Zealand

The Royal Commission on Railways of New Zealand in its recent report to Parliament discusses that country's problem of co-ordinating rail and highway services and recommends the regulation of highway carriers.

The discussion is an attempt to answer the question on the subject recently submitted to the commission for investigation. This question was framed as follows: "To what extent is it possible and desirable, in the interests of the economic welfare of the Dominion, to co-ordinate rail and road transport, having due regard to the rights of owners of road transport services, the necessity of a satisfactory standard of service and all other relevant considerations?"

The commission's comment on the question follows in full:

"If by co-ordination of road and railway services is meant the utilization of these means of transport to the best advantage of the community from an economic point of view, your Commission is of opinion that, under existing conditions, it is not possible to co-ordinate rail and road transport unless the full control and operation of all such transport is vested in one authority. The whole matter, however, is one which requires a large amount of careful study and investigation, which, in the time at our disposal, your Commission is unable to give.

"However, your Commission is of the opinion that it is essential that motor transport, particularly that engaged in freight service, be licensed, regulated and controlled by a properly constituted authority, which would require to take all factors into consideration before licenses are granted. The effect of existing competition between railway and road is to increase the cost of transporting primary products and the lower-class freight, which usually are not carried by motor transport, and to reduce the costs on higher-rated traffic and on general merchandise. The average railway rate on freight carried last year was 2.32d. per ton per mile. This is much lower than is possible by motor transport.

"Owing to the loss in railway revenue from freight and passenger traffic, the average rate on freight carried will have to be increased, and, as the great bulk of the traffic is primary products and low-rated commodities, the increase will fall on them. The diversion of passenger traffic from the railway to the motor-vehicle has caused a large and continued decrease in passenger revenue, and will have the effect of materially increasing the freight rates, if losses are to be arrested.

"It is uneconomic and most inadvisable that the cost of transporting primary products or of materials necessary for their production should be forced upwards, and is against the interests of the Dominion; but if motor transport is permitted full scope in all districts, without restriction, the effect will be to increase the total cost of transport and cause economic loss.

"Under some conditions it is apparent that motor transport on all classes of freight will be more economical than railway transport, and should be permitted and encouraged; but in view of the fact that trunk railways are necessary for connecting distant centres and for the carriage of passengers and all classes of freight between them, as well as for the development of the Dominion, the folly of allowing unrestricted motor transport along these routes, which is, on the whole, more economically given by the railways must be apparent, and should, in our opinion, be permitted only in cases where it can be shown to be warranted.

"For the purpose of co-ordinating rail and motor services it will be necessary to introduce legislation to provide for the establishment of a suitable authority to make regulations for the license, control, and regulation of motor transport throughout the Dominion. We recommend that consideration be given to the question of enacting the necessary legislation."

Hearing by Colorado Board on D. & R. G. W. Petition

The petition of the Rio Grande Transport Company, a subsidiary of the Denver & Rio Grande Western, for permission to inaugurate freight and express pick-up delivery service was heard by the Public Utilities Commission of Colorado on December 9. Many protests against the granting of the application were filed, among the protestants being the Colorado & Southern and the Motor Truck Common Carriers Association.

The Colorado & Southern stated that public convenience and necessity did not require the highway freight service which the Denver & Rio Grande Western proposed to furnish through the subsidiary. The Motor Truck Common Carriers Association opposed the application holding that the inauguration of pick up and delivery service by the railroad would mean substantial losses in the traffic now handled by members of the organization.

Freight Trucking Service Established in Brooklyn

(Continued from page 1421)

making similar deliveries by shunting trolley freight cars over the tracks in Brooklyn for more than twenty-five years. The new service is a complementary innovation available to firms not located on a trolley line or where the construction of the plant does not permit the introduction of a freight car siding. Paramount Station, Brooklyn, is the name of the new station to and from which freight intended for the store-door handling is shipped.

This Brooklyn operation is the first installation of store-door service in New York City since July when the Baltimore & Ohio abandoned its plan of co-ordinated rail-motor truck service for the handling of carload, unrestricted, non-perishable freight on Manhattan Island (see *Motor Transport Section* of August 23, page 419). Since the abandonment of this B. & O. service the agitation for some form of collection and delivery on Manhattan has become more animated; two recent pronouncements on the subject have come from New York business interests.

On September 21, the Shippers' Conference of Greater New York, the Merchants Association of New York, the Publishers Association of New York City and the Chamber of Commerce of the Borough of Queens joined in a letter to railway executives urging the latter to install a co-ordinated trucking service. On November 6 the Chamber of Commerce of the State of New York adopted a resolution endorsing the principle of store-door

collection and delivery of carload freight in New York City. This resolution expressed the hope that "carriers and local organizations representing merchants will continue their joint studies and investigations of the New York freight handling situation in an effort to bring about a satisfactory method of such collection and delivery service as applied to carload merchandise freight and will actively continue their efforts until such a method has been evolved."

Meanwhile the presidents' conference committee of trunk line executives has received the report and recommendations of its sub-committee which had been studying the subject since August, 1929, when the Interstate Commerce Commission's decision in the "constructive and off-track stations" case permitted the carriers serving New York to cancel their "constructive" station tariffs and to limit the practice of trucking in lieu of lighterage to interchanges of freight between railroads or between railroads and steamship lines. Upon receiving the recommendations of its sub-committee the presidents' conference committee turned the report over to the operating and traffic executives of the lines serving New York. Within a few days came the announcement that the railways were working on a plan to provide the desired service by utilizing the Railway Express Agency as a trucking medium to serve all carriers.

This proposal to employ the Express Agency is undoubtedly prompted by the desire to obviate any possibility of manipulated trucking charges which were the principal complaint in connection with the former "constructive" station deliveries. Testimony in the Interstate Commerce Commission hearings in the "constructive and off-track stations" case revealed that rumors of manipulated trucking charges persisted all the while the former plan of direct delivery was in effect.

No announcement of action in connection with the foregoing proposal to utilize the Express Agency has yet been made, carrier representatives stating that the matter is still being studied.

Another development in connection with freight trucking in New York, however, is the pending proposals of the Pennsylvania and the Lehigh Valley to abandon their off-track inland stations on Manhattan and return entirely to pier deliveries of freight. The cancellation of these inland station tariffs is opposed by New York shippers and has been suspended by the Interstate Commerce Commission, pending an investigation.

"I am not implying that transportation by rail is either obsolete or in danger of becoming so, for that is at once ridiculous and untrue. I am implying that any business when confronted by competition from a new mechanical development ought to embrace every opportunity to ally itself with that development . . . The railroads will ultimately realize—as many of them now do—that the obvious thing to do is to own and operate motor trucks themselves and thus enjoy the profit accruing from their use.

"The motor truck has demonstrated its economy and its great desirability for many forms of freight handling. It should be willing to assume a fair proportional share of whatever tax burden may be necessary to support the modern highways over which it operates. . . ."

—The Autocar Messenger.

Parker Regulation Bill Recommitted by Senate

(Continued from page 1421)

consolidate and buy up and monopolize bus lines, then the railroads began to exercise their lobbying methods to defeat the bill. Senators have come to me and said that the railroads are now opposing the bill. They were not in evidence until after the senate by a vote of 21 to 27 defeated the amendment proposed by the Senator from Illinois, which would have taken out of the bill that provision on page 20, beginning in line 22, which reads:

(c) No consolidation, merger, or acquisition of control shall be approved under this section if it involves the consolidation or merger of two or more carriers by railroad or the acquisition of control of any carrier by railroad by another such carrier; nor shall any consolidation, merger, or acquisition of control be approved under this section if one or more of the corporations involved is engaged, directly or indirectly, in the transportation of persons by railroad.

"That was a prohibition placed in the bill by the committee to prevent a monopoly of passenger traffic by the railroads. Everyone knows that the railroads desire to monopolize the passenger traffic of the nation. They do not make any attempt to conceal it. They were perfectly satisfied with the bill when there was in it no prohibition against their absorbing all of the bus lines of the nation if they chose to unify them with their rail systems. When the bill permitted that sort of thing to be done it was entirely satisfactory to the railroads. But now that the senate has refused to permit them to acquire by consolidation, purchase, or otherwise all of the bus lines of the nation there is a concerted movement here to have the bill sent back to the committee and killed."

Some sentiment in favor of regulating motor truck transportation as well as passenger business was indicated in the debate. In this connection, Senator Glenn, speaking in favor of recommitting the bill said:

"There is a very definite feeling and I think a well-founded feeling that when we deal with the bus situation we should not separate it between passengers and passenger vehicles, and trucks and freight, but that we should have a comprehensive bill dealing with the truck and freight problem together with the bus and passenger problem. The bill does not purport or intend to touch the great problem of freight on the public highways. There are other differences, not only of opinion about the provisions of the bill but there are also differences of opinion as to the construction of the language upon the most important features of the bill.

"In my opinion and not with a desire finally to prevent the passage of a bus bill, but with a desire finally to obtain a bus bill which the country does need and one which is comprehensive and thorough and reasonably clear in its language and construction. I think that the bill should be recommitted."

Suggestions along the same line recently came from Representative Hoch of Kansas, a member of the House committee on interstate and foreign commerce. He is quoted in a recent issue of the United States Daily, in the course of a general discussion of transport legislation, as saying:

"The subject of Federal regulation of the motor freight business was discussed in past sessions of congress. So far as logic is concerned, there is no reason why they should not be regulated the same as passenger buses. It was argued, however, in the past discussion of motor traffic in interstate business that the great bulk of the motor truck freight business is more or less local in character.

"Sponsors of motor passenger regulation said logically that trucks as well as buses should be regulated. To my mind, there is no reason for drawing a distinction between the two classes, but motor traffic is a relatively new field so far as anything more than local hauls is concerned and the argument has been that congress should not attempt too much regulation at once, and that the greatest regulatory need was for motor bus control.

"The human element, of course, is for that priority of consideration, as passenger motor buses call for safeguarding of the public. I do not doubt that in time we will have Federal regulation of freight traffic in motor buses on interstate routes."

The assumption that the recommittal of the bill means its death so far as the present session of congress is concerned is quite logical although the decision of the committee to hold hearings may mean that the measure, in revised form, will again be reported to the Senate before adjournment. As the National Association of Motor Bus Operators in a recent statement points out:

"Whether Senator Couzens is correct in his surmise that the legislation is practically dead as a result of its return to committee remains to be seen. In a short session of Congress where the major part of the time is devoted to the passage of appropriation and supply bills there is never any great likelihood of getting legislation of a controversial nature passed unless it has been debated at some length during the previous session and occupies a favorable place on the calendar when the short session starts. If such legislation can not be disposed of in the Senate in the early days of the short session the arrival of the supply and appropriation bills from the House for consideration would ordinarily dis-

place it as the unfinished business and take away its favorable standing on the calendar."

The subject of motor vehicle regulation was discussed by President Hoover, in his annual message to congress, and by the Interstate Commerce Commission in its annual report. The President mentioned the Parker Bill as one of the measures which he said it is desirable should be completed. The Interstate Commerce Commission made the following reference to the subject.

"In the present state of the law there is no regulation exercised over the operation of motor buses and motor trucks engaged in interstate commerce when they are not used in terminal service in connection with rail transportation. In view of this situation and considering the rapidly increasing importance of motor transportation in 1926 we entered upon an investigation into the general question of the operation of motor buses and motor trucks by or in connection or competition with common carriers subject to the interstate commerce act. After extended hearings we made a report (Motor Bus and Motor Truck Operation, 140 I. C. C. 685) to the Congress with certain recommendations as to legislation which we believed our investigation had shown was necessary in respect of the operation of motor vehicles in interstate commerce.

"A bill, H. R. 10288, Seventy-first Congress, now pending as unfinished business of the Congress, proposes legislation to regulate the transportation of persons in interstate commerce by motor bus, as recommended by us. This bill incorporates some, but not all, of our recommendations. For example, this bill does not provide for the participation by rail or water carriers subject to the act in joint rates and through routes with motor vehicle lines.

"Since 1926 there has been a greatly expanded use of motor vehicles by the rail and water carriers subject to our jurisdiction. Numerous situations have been called to our attention by formal complaints and otherwise concerning these operations. In order that we may be fully informed as to the present situation and the extent of motor vehicle operations in interstate commerce and their relation to rail and water transportation and the manner in which such operations are being conducted, with a view to determining the best means of co-ordinating the various transportation agencies in the interest of an efficient and adequate system of transportation, we have instituted an investigation into the matter of the coordination of motor transportation with rail and water transportation. This proceeding has been assigned for hearing at important cities in various parts of the country.

"We deem it appropriate to say, however, that we know of no good reason why this new inquiry should operate in any wise to postpone or delay the consideration of the legislation for the regulation of the motor bus which is now pending in Congress. While it is not unlikely that such legislation, in the form now proposed, may prove inadequate to meet all the needs of the situation, and while the investigation which we have under way may develop facts pertinent in that connection, nevertheless such legislation will be a first step in regulation which we believe ought to be taken without delay. It will furnish a nucleus of experience upon which to build for the future."

Motor Transport Officers

L. E. St. John, Jr. has been appointed assistant manager of the northern district of the Pacific Motor Transport Company with headquarters at Portland, Ore.

Effective December 1, **E. S. Haverly** was appointed general superintendent of the Interstate Transit Lines, **E. J. Condon** was appointed traffic manager and **W. A. Hall** auditor.

Walter Maxwell, superintendent of the Redwood Highway division of the Pacific Greyhound Lines, has been transferred from Eureka to Santa Rosa, Cal., and **Earl Cook,** supervisor, with headquarters at Santa Rosa, has been transferred in the same capacity to Sacramento, Cal.

Among the Manufacturers

H. W. Roland, sales manager of the commercial vehicle division of the Reo Motor Car Company, has been appointed to the motor truck committee of the National Automobile Chamber of Commerce.

Hunt-Spiller Manufacturing Company representatives, handling brake drums for motor trucks and motor coaches, are as follows: **H. H. Mills** covering eastern territory, **G. L. Leach** covering the middle west and **R. R. Wells** covering the western states.

Walter P. Chrysler has been appointed chairman of the banquet committee for the annual automobile show dinner of the National Automobile Chamber of Commerce to be held at the Hotel Commodore, New York City, on January 6, 1931.

Firestone de La Argentina, a subsidiary of the Firestone Tire & Rubber Company, has awarded a contract to Dwight P. Robinson & Company of Argentina, Inc., for the construction of a new tire manufacturing plant and power house at Buenos Aires. Work on this project will commence immediately.

A net profit of $1,541,034 was reported by the **Firestone Tire & Rubber Company** for the year ending October 31. Net sales of the year amounted to $120,015,664; expenses were $112,364,530, thus leaving an operating profit of $7,651,134. Adjustments on this latter to allow for interest earned and paid, Liberia development expenditures and other deductions, including provision for taxes, resulted in the above-mentioned net profit. Dividends and other surplus deductions resulted in a decrease of the surplus from $47,453,508 on October 31, 1929, to $41,984,249 at the close of the past fiscal year.

F. A. Gerrard, division manager of the **Russell Manufacturing Company** in the Pacific coast territory, has been appointed assistant manager of the replacements department, with headquarters at Middletown, Conn. Mr. Gerrard is a native of Barre, Vt., and a graduate of Bowdoin College. Previous to entering the service of the Russell Company in 1924, he was connected with the Textile Banking Company at New York. He has served as division manager of the New York territory of the Russell Company, and in 1926 he was appointed division manager of the Pacific coast territory, the position he held until his recent promotion.

Other appointments announced by the **Russell Manufacturing Company** are as follows: **R. W. Conroy,** assistant division manager of the Dallas, (Tex.) division has been transferred to San Francisco as manager of the Russell Pacific Coast division. **Darrell P. Jolley** has been appointed sales representative in the Salem, Ore., territory. **C. Clifford Lyman,** assistant to the manager of the replacements department, has been appointed general office manager at Middletown, Conn.

Ashton G. Bean, president of Bishop & Babcock Company at Cleveland, Ohio, has been elected president of the **White Motor Company,** to succeed **Robert W. Woodruff,** chairman of the board of directors, who has also held the presidency

Ashton G. Bean

since the death of **Walter C. White** in September, 1929. Mr. Bean began his business career at St. Louis, Mo., as a banker under the late Festus G. Wade who was president of the Mercantile Trust Company of that city. He was later president of the Dean Electric Company of Elyria, O., (now the General Industries Company) and in recent years has served as president of Bishop & Babcock Manufacturing Company of Cleveland.

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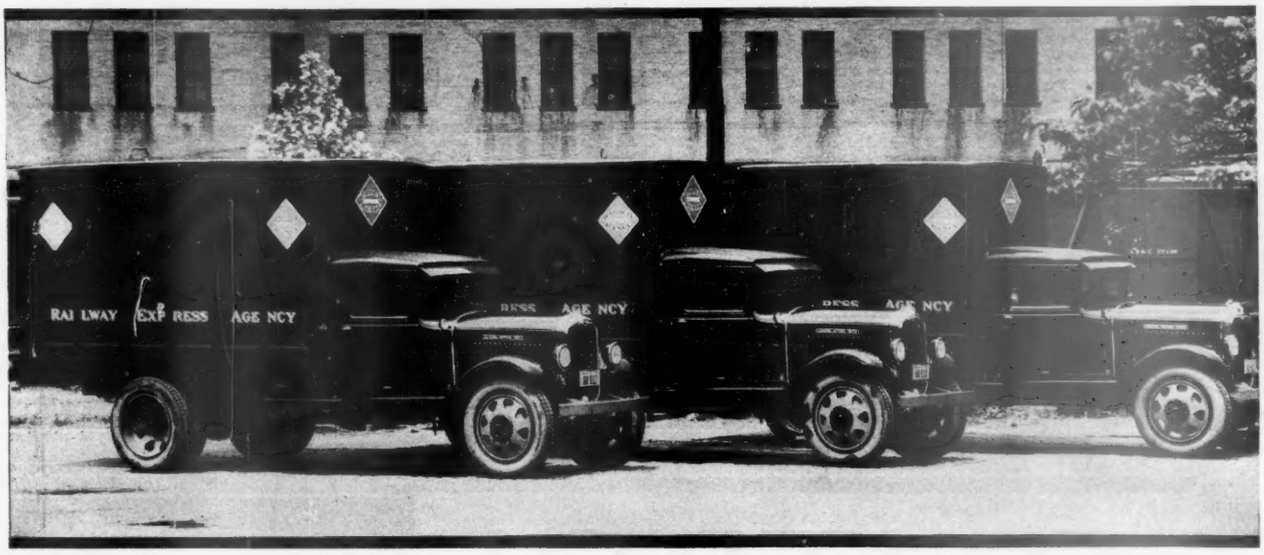

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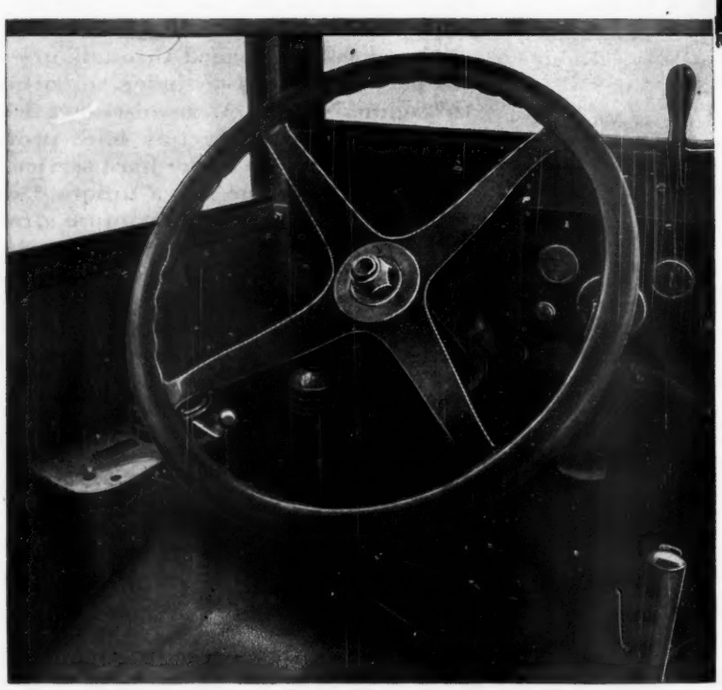

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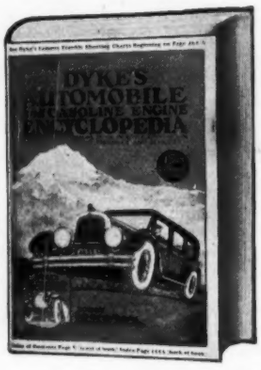

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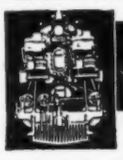

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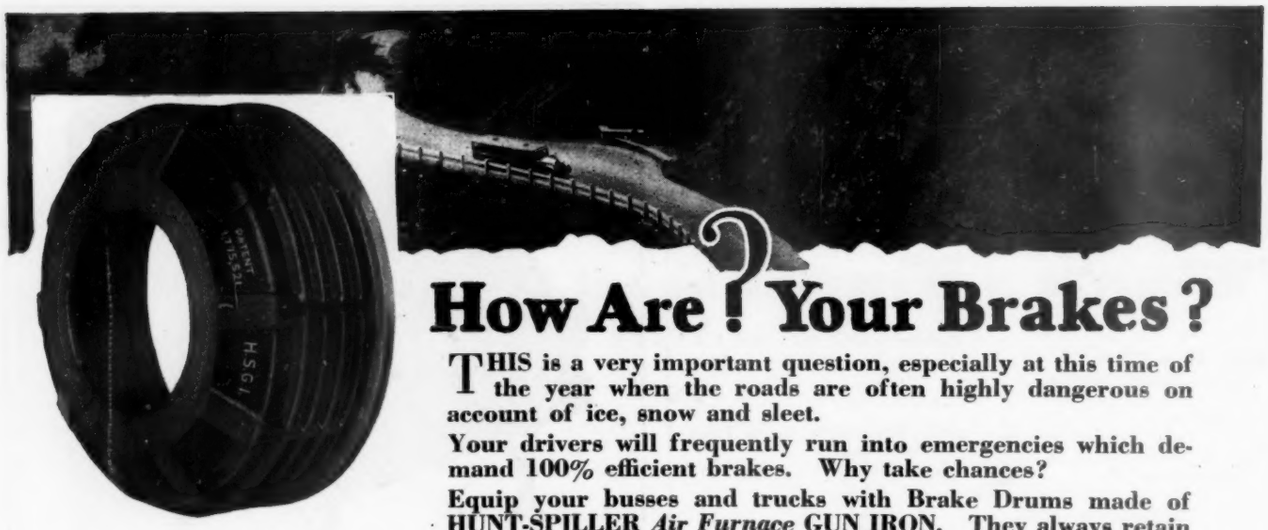

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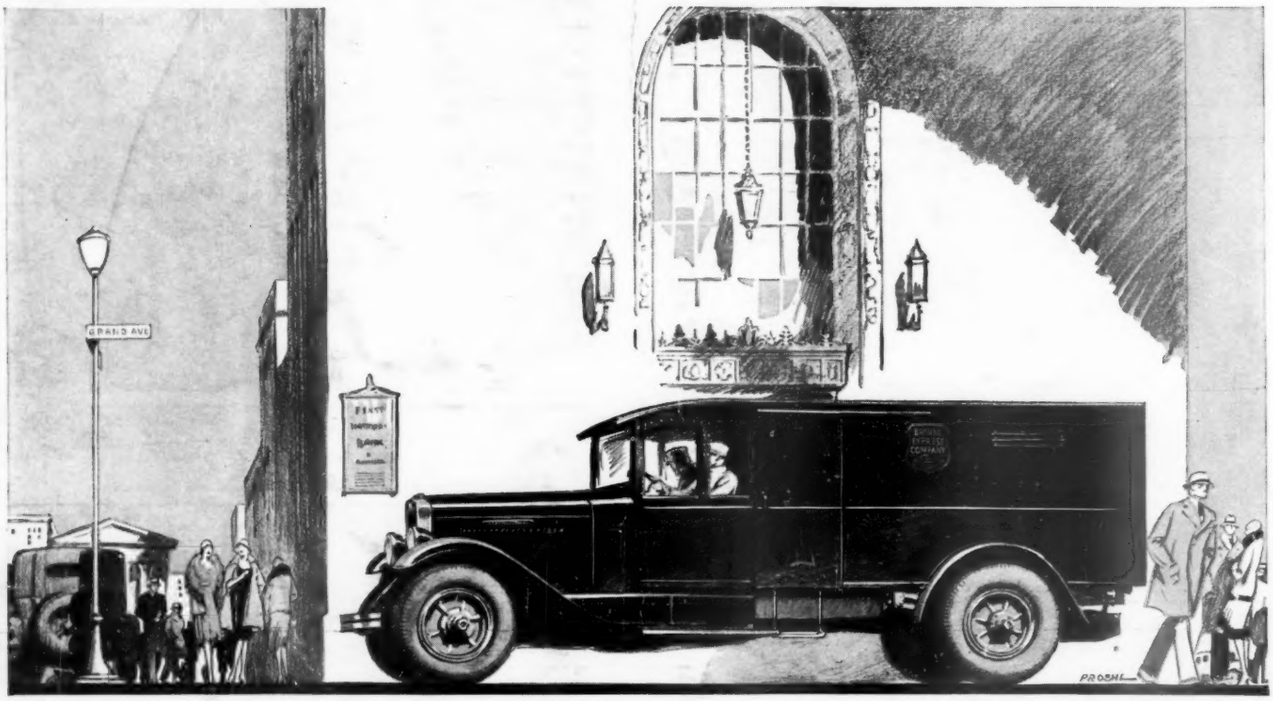

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